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# **WATER SUPPLY OUTLOOK FOR MONTANA**



**U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE**

Collaborating with

**MONTANA AGRICULTURAL EXPERIMENT STATION**

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF  
**JUNE 1, 1977**

## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SNOW COURSE MEASUREMENTS BY A SURVEY TEAM IN UTAH'S WASATCH RANGE.  
ORC-254-10

### PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, 6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

### PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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MONTANA WATER SUPPLY OUTLOOK  
June 1, 1977

\* \* \* \* \*  
\*  
\* Montana currently has 27 SNOTEL sites equipped with meteor- \*  
\* burst telemetry. Three additional sites will be authorized \*  
\* in early June. Real-time data on snow water equivalent, \*  
\* total precipitation, and air temperature is being received. \*  
\*  
\* \* \* \* \*

Cooler weather and additional moisture has helped ease the low water condition for a short time. A small amount of snow remains in the higher elevation of some basins.

All streams are past the snowmelt peak. Stream levels will continue to drop as soil moisture levels decline and all snow is melted. Weather patterns during May did not significantly change the water supply forecasts issued on May 1.

Irrigation demands have dried up some streams already. Many others will become dry as streamflow drops and irrigation demands increase.

Some irrigation reservoirs did not fill as early season irrigation demands exceeded inflow. It appears some multi-purpose reservoirs may not fill completely as a result of low streamflow caused by deficient snow pack.

Montana, along with other western states, must now be prepared to face one of the lowest runoffs of record.



# SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF:	
		Last Year	Average
<u>COLUMBIA RIVER DRAINAGE</u>			
Kootenai	6	15	16
Flathead	9	43	33
Upper Clark Fork	5	28	22
Lower Clark Fork	4	14	10
Bitterroot	6	16	20
<u>MISSOURI RIVER DRAINAGE</u>			
Jefferson	2	18	21
Madison	-	-	-
Gallatin	7	33	33
Missouri Main Stem	1	69	40
Judith-Musselshell	1	69	40
Marias-Teton-Sun	-	-	-
Milk	-	-	-
<u>YELLOWSTONE RIVER DRAINAGE</u>			
Yellowstone (above Bighorn)	11	41	46



# SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average †

## COLUMBIA RIVER BASIN

<u>Kootenai</u>							
Baree Trail	3800	48	7.5	6-6	6.4	6.3	6.1
Murphy Lake R. S.	3000	48	22.6	6-1	19.4	20.0	20.6
Raven	3050	48	23.0	6-6	14.9	14.3	16.6

<u>Flathead</u>							
Desert Mountain	5600	54	8.4	5-31	7.8	8.7	8.9
Marias Pass	5250	54	6.5	5-22	7.4	7.0	6.2

<u>Clark Fork</u>							
Black Pine	7100	48	10.0	6-1	8.9	8.6	8.7
Lubrecht Forest	4100	48	26.8	6-5	15.5	22.3	22.8
Seeley Lake R. S.	4030	48	11.9	6-6	8.8	11.0	10.9
Skalkaho Summit	7260	48	10.8	6-2	10.4	8.8	9.9

<u>Bitterroot</u>							
Gibbons Pass	7100	48	7.1	5-31	6.1	--	7.0
Lolo Pass	5250	48	10.6	5-27	10.0	9.9	9.9

## MISSOURI RIVER BASIN

<u>Beaverhead</u>							
Lakeview	6700	48	15.3	5-31	17.6	14.9	15.1

<u>Madison</u>							
West Yellowstone	6700	48	6.5	6-3	2.8	2.6	3.1

<u>Gallatin</u>							
Bridger Bowl	7250	48	17.0	6-1	15.8	15.0	16.0
College Site No. 2	4860	48	17.7	5-27	16.2	15.9	14.3
Lick Creek	6860	48	18.8	6-1	15.0	15.0	17.4
Twenty-One Mile	7150	48	10.0	6-6	8.6	9.8	9.8

<u>Missouri Main Stem</u>							
Kings Hill	7420	48	11.8	5-31	9.9	11.0	10.7
Stemple Pass	6350	48	5.9	--	--	5.3	5.2

<u>Milk</u>							
Beaver Creek	3950	48	20.9	5-27	17.9	9.5	14.6
Rocky Boy	4700	36	10.1	5-29	9.1	8.5	9.6

<u>Yellowstone</u>							
Battle Ridge	6020	48	17.6	6-1	13.1	13.3	14.7
Northeast Entrance	7350	48	9.4	--	--	8.7	9.3
PMC Dryland	3700	48	20.7	6-1	5.0	5.2	--

† Average for period of record.





**RESERVOIR STORAGE (Thousand Acre Feet)** END OF MONTH

JUNE 1

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average
COLUMBIA RIVER BASIN					
Kootenai	Koocanusa	5,694.0	2,842.0	3,430.0	--
Flathead	Hungry Horse	3,428.0	2,736.0	2,940.0	2,639.0
	Flathead Lake	1,791.0	1,310.0	1,444.0	1,481.0
	Camas (4)	45.2	11.8	26.8	36.3
Clark Fork	Mission Valley (8)	100.3	77.8	81.1	63.7
	Georgetown Lake	31.0	30.7	27.8	25.6
	Lower Willow Creek	4.9	3.2	4.9	4.1
	Nevada Creek	12.6	--	12.8	12.1
	Noxon Rapids	334.6	293.9	322.6	243.9
Bitterroot	Como	34.9	28.9	32.6	29.1
	Painted Rocks	31.7	32.6	33.5	32.4

**MISSOURI RIVER BASIN**

Beaverhead	Clark Canyon	257.2	166.9	220.1	149.5
	Lima	84.0	66.6	80.4	60.2
Ruby	Ruby	38.8	--	38.8	37.7
Madison	Hebgen Lake	337.5	320.1	265.0	287.1
	Ennis Lake	41.0	34.5	35.0	36.9
Gallatin	Middle Creek	8.0	7.9	6.3	7.0
Missouri	Canyon Ferry	2,043.0	1,739.0	1,747.0	1,652.0
	Hauser & Helena	61.9	60.7	62.5	57.9
	Lake Helena	10.4	10.0	10.7	9.1
	Holter Lake	81.9	78.2	81.4	73.7
	Smith River	10.6	--	11.5	10.8
	Bair	7.0	--	7.0	6.7
	Martinsdale	23.1	--	21.0	16.6
	Deadman's Basin	72.2	--	--	57.0
	Fort Peck Lake	18,910.0	15,973.0	18,340.0	13,920.0
Sun	Gibson	99.0	85.2	85.2	92.8
	Willow Creek	32.2	27.2	29.6	28.1
	Pishkun	32.0	31.2	30.0	28.8
Marias	Lower Two Medicine	11.9	12.2	--	--
	Four Horns	19.2	12.2	--	--
	Swift	30.0	23.6	29.4	27.7
	Lake Frances	111.9	71.0	100.0	94.6
	Tiber	1,347.0	525.0	627.7	691.1
Milk	Beaver Creek	3.5	2.9	2.4	--
	Fresno	127.2	46.8	97.0	102.1
	Nelson	66.8	32.5	46.7	46.3
	Lake Sherburne	66.2	16.9	49.9	29.7
Yellowstone	Mystic Lake	21.0	3.4	10.8	6.0
	Tongue River	68.0	61.7	58.9	40.8
	Cooney	27.4	19.4	16.0	17.3
Bighorn	Bighorn Lake	1,356.0	982.9	764.0	810.3

Average based on 1958-72 period.



## SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
					Last Year	Average
NAME	Elevation					
ARCH FALLS	7350	6/01	EST	.0	11.8	9.2
RADGER PASS	6900	5/31	24	12.1	44.8	-
BANFIELD MOUNTAIN	5600	6/01	EST	.0	5.3	4.1
BANFIELD MOUNTAIN PILLOW	5600	6/01	SP	.0	.0	1.3
RIG COULEE	5100	5/27	0	.0	-	-
RIG CREEK	6750	5/31	48	26.9	36.0	46.5
BLACK BEAR	7950	6/01	EST	3.4	35.5	-
BLACK BEAR PILLOW	7950	6/01	SP	2.9	32.9	-
BLACK PINE	7100	6/01	0	.0	5.6	3.0
BLACK PINE PILLOW	7100	6/01	SP	.0	6.8	2.3
BLOODY DICK PILLOW	7600	6/01	SP	.0	-	-
BLUE LAKE	5900	5/31	0	.0	11.0	-
BRIDGER BOWL	7250	6/01	12	5.5	19.3	22.8
BRIDGER BOWL PILLOW	7250	6/01	SP	4.6	18.0	18.8
CALVERT CREEK	6450	6/01	EST	.0	.0	-
CALVERT CREEK PILLOW	6450	6/01	SP	.0	-	-
CAMP MISERY	6400	5/25	62	32.0	37.5	-
COLE CREEK	7850	6/01	0	.0	-	-
COLE CREEK PILLOW	7850	6/01	SP	.0	-	-
COMBINATION	5600	6/01	0	.0	-	-
COMBINATION PILLOW	5600	6/01	SP	.0	-	-
COOKE STATION	8150	6/01	EST	.0	12.2	10.9
COPPER BOTTOM	5200	6/01	EST	.0	-	-
COPPER BOTTOM PILLOW	5200	6/01	SP	.0	-	-
COPPER CAMP	6950	6/01	EST	.0	-	-
COPPER CAMP PILLOW	6950	6/01	SP	.0	-	-
DEADMAN CREEK	6450	6/02	0	.0	.0	.0
DEADMAN CREEK PILLOW	6450	6/01	SP	.0	.0	.0
DEVILS SLIDE	8100	6/01	EST	11.8	27.0	23.8
DIVIDE	7800	6/01	EST	.0	.0	-
DIVIDE PILLOW	7800	6/01	SP	.0	.0	-
EMERY CREEK PILLOW	4350	6/01	SP	.0	-	-
FATTY CREEK	5500	5/31	4	2.2	1.7	7.6
FISH CREEK	8000	5/27	9	2.2	-	-
FISHER CREEK	9100	6/01	EST	23.0	41.6	32.1
FISHER CREEK PILLOW	9100	6/01	SP	22.2	33.9	32.4
FROHNER MEADOWS	6480	6/01	EST	.0	-	-
FROHNER MEADOWS PILLOW	6480	6/01	SP	.0	-	-
GARVER CREEK PILLOW	4250	6/01	SP	.0	.0	-
GIBBONS PASS	7100	5/31	0	.0	8.3	8.6
GRAVE CREEK	4300	5/26	0	.0	.0	1.6
GRAVE CREEK PILLOW	4300	5/26	SP	.0	.0	-
GUNSIGHT LAKE	6300	5/31	23	11.6	31.2	-
HAND CREEK PILLOW	5030	6/01	SP	.0	-	-
HAWKINS LAKE	6450	6/01	EST	.8	25.9	20.2
HAWKINS LAKE PILLOW	6450	6/01	SP	1.0	23.4	20.4
HELL ROARING DIVIDE	5770	6/01	0	.0	10.6	12.6
HIGHWOOD DIVIDE	5650	5/27	0	.0	.0	-

Average based On 1958-72 period. A - Aerial observation; water content estimated.

SP - Snow Pillow observation; water content only. EST-data estimated from telemetered SNOTEL data received.



# SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average
HIGHWOOD STATION	4600	5/27	0	.0	.0	-
HOOD MEADOW	6600	6/01	EST	.0	2.2	1.8
HOODOO BASIN	6000	6/01	EST	2.5	-	34.9
HOODOO BASIN PILLOW	6000	5/31	SP	2.4	29.0	33.8
HOODOO CREEK	5900	6/01	EST	.0	-	33.5
KINGS HILL	7500	6/01	EST	.0	5.0	-
LEMHI RIDGE PILLOW	8100	6/01	SP	.0	2.6	-
LICK CREEK	6860	6/01	EST	.0	.0	.4
LICK CREEK PILLOW	6860	6/01	SP	.0	.0	.2
LOLO PASS PILLOW	5230	6/01	SP	.0	-	-
LOOKOUT (ID)	5250	5/31	0	.0	14.6	15.8
LOST HORSE	5940	5/31	7	3.5	28.4	21.4
LUBRECHT FLUME PILLOW	4800	6/01	SP	.0	-	-
MADISON PLATEAU	7750	6/01	EST	.0	14.0	-
MADISON PLATEAU PILLOW	7750	6/01	SP	.0	15.7	6.9
MANY GLACIER PILLOW	4960	6/01	SP	.0	-	-
MAYNARD CREEK	6210	6/01	0	.0	.0	5.4
MAYNARD CREEK PILLOW	6210	6/01	SP	.0	2.2	4.0
MEADOW CREEK PILLOW	4000	6/01	SP	.0	.0	-
MOUNT LOCKHART	6400	5/27	0	.0	-	-
MOUNT LOCKHART PILLOW	6400	5/27	SP	.7	13.4	-
NEZ PERCE CAMP PILLOW	5580	6/01	SP	.0	-	-
NOISY BASIN	6040	5/25	59	30.4	31.5	-
NOISY BASIN PILLOW	6040	5/25	SP	23.2	22.5	-
NORTH FK. ELK CREEK	6250	6/01	0	.0	-	-
NORTH FK. ELK CREEK PILL	6250	6/01	SP	.0	-	.0
NORTH FORK JOCKO	6330	6/01	23	12.0	21.8	32.0
NORTHEAST ENTRANCE	7400	6/01	EST	.0	.0	.2
NORTHEAST ENTRANCE PILL.	7400	6/01	SP	.0	.0	.0
PETERSON MEADOWS	7200	6/01	0	.0	.0	-
PIKE CREEK PILLOW	5930	5/27	SP	.0	-	-
POORMAN CREEK	5100	6/01	EST	.0	8.2	8.5
POORMAN CREEK PILLOW	5100	6/01	SP	.0	6.0	6.2
PORCUPINE PILLOW	6500	6/01	SP	.0	-	-
ROCKY BOY	4700	5/27	0	.0	.0	-
ROCKY BOY PILLOW	4700	5/27	SP	.0	.0	.0
SADDLE MOUNTAIN	7940	5/31	12	5.8	23.5	18.7
SADDLE MOUNTAIN PILLOW	7940	5/31	SP	8.3	25.8	19.8
SHOWER FALLS	8100	6/01	EST	13.0	32.5	27.5
SHOWER FALLS PILLOW	8100	6/01	SP	12.4	21.8	24.3
SILVER RUN	6630	6/01	EST	.0	-	-
SILVER RUN PILLOW	6630	6/01	SP	.0	-	-
SKALKAHO SUMMIT	7260	6/01	1	.4	18.8	14.6
SKALKAHO SUMMIT PILLOW	7260	6/01	SP	.9	-	-
SPOTTED BEAR MOUNTAIN	7000	5/31	0	.0	.0	-
SPUR PARK	8000	6/02	13	7.2	10.4	18.1
SPUR PARK PILLOW	8100	6/01	SP	8.8	12.5	17.5
STAHL PEAK	6050	5/26	EST	13.0	31.9	30.6
STAHL PEAK PILLOW	6050	5/26	SP	12.6	27.4	-
STRYKER BASIN	6180	5/25	17	8.0	-	-

Average based On 1958-72 period. A - Aerial observation; water content estimated.  
 SP - Snow Pillow observation; water content only. EST - data estimated from telemetered SNOTEL data received.







# SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average
STUART MOUNTAIN	7400	5/18	14	3.7	12.4	20.3
TEPEE CREEK	8000	6/01	EST	.0	11.0	-
TEPEE CREEK PILLOW	8000	6/01	SP	.0	5.6	-
TRINKUS LAKE	6100	5/31	19	10.4	16.6	-
TV MOUNTAIN	6800	5/18	9	1.8	4.4	9.9
TWELVEMILE CREEK	5600	6/01	0	.0	.0	.6
TWELVEMILE CREEK PILLOW	5600	6/01	SP	.0	.0	.0
TWIN LAKES	6510	5/31	18	9.2	37.2	31.4
TWIN LAKES PILLOW	6400	5/31	SP	6.4	35.5	28.1
UPPER HOLLAND LAKE	6200	5/31	2	.9	22.0	-
WALDRON	5600	6/01	EST	.0	-	-
WALDRON PILLOW	5600	6/01	SP	.0	.0	.0
WEASEL DIVIDE	5450	5/26	0	.0	20.7	19.6
WEST YELLOWSTONE PILLOW	6700	6/01	SP	.0	.0	.0
WHISKEY CREEK	6800	6/01	EST	.0	.0	-
WHISKEY CREEK PILLOW	6800	6/01	SP	.0	3.6	-
WHITE MILL	8700	6/01	EST	11.8	28.4	24.5
WHITE MILL PILLOW	8700	6/01	SP	10.5	19.6	-

Average based On 1958-72 period. A - Aerial observation; water content estimated.

SP - Snow Pillow observation; water content only. EST - data estimated from telemetered SNOTEL data received.



# SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Elevation				Last Year	Average

## SUPPLEMENTAL MEASUREMENTS 1977

### JANUARY 1

KING CREEK SADDLE	4550	12/31	11	1.3	-	-
KING SPRINGS	4150	12/31	8	1.4	-	-
MISSION MOUNTAIN	5050	12/31	10	1.2	-	-

### MARCH 1

HOLBROOK	4530	2/23	21	5.7	9.0	10.5
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### APRIL 1

BULL MOUNTAIN	6600	4/01	21	5.0	7.9	-
KISHENEHN	3890	3/30	12	2.8	7.9	8.4
PIKE CREEK	5930	4/08	42	15.2	-	-
PIKE CREEK PILLOW	5930	4/08	SP	15.3	-	-
ROCK CREEK	5600	4/05	68	18.7	9.9	10.2
WEST YELLOWSTONE PILLOW	6700	3/31	SP	3.6	12.7	8.8

### MAY 1

BADGER PASS	6900	5/06	47	20.2A	56.9	46.2
BEAVER LAKE	5900	5/06	17	5.8A	30.3	25.7
BLUE LAKE	5900	5/06	15	5.8A	35.4	26.5
FIVE-BULL	5700	5/06	0	.0A	4.3	5.1
FREIGHT CREEK	6000	5/06	0	.0A	20.2	15.9
GUNSIGHT LAKE	6300	5/06	50	21.6A	50.8	45.4
LUBRECHT HYDROPLOT	4200	5/02	0	.0A	-	.0
SPOTTED BEAR MOUNTAIN	7000	5/06	0	.0A	11.8	11.8
STUART MOUNTAIN	7400	5/05	21	6.8A	38.3	35.8
TRINKUS LAKE	6100	5/06	45	21.2A	41.9	49.4
TWIN CREEKS	3580	5/06	0	.0A	.0	1.8
UPPER HOLLAND LAKE	6200	5/06	29	13.2A	43.1	41.1

Average based On 1958-72 period. A - Aerial observation; water content estimated.

SP - Snow Pillow observation; water content only.



# SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average

## CORRECTIONS TO PREVIOUSLY PUBLISHED 1977 DATA

### JANUARY 1

DEADMAN CREEK	6450	12/27	<u>28</u>	4.9	6.4	4.3
HIGHWOOD DIVIDE	5650	12/28	<u>23</u>	<u>5.2</u>	5.8	-
NEWTON MOUNTAIN	5600	1/03	<u>21</u>	<u>4.6</u>	-	-
NORRIS BASIN (WY)	7500	1/04	<u>15</u>	2.2	7.7	4.6
SILVER RUN PILLOW	6630	12/29	<u>SP</u>	.9	-	-

### FEBRUARY 1

BASIN CREEK	7180	1/27	11	<u>1.8</u>	-	-
CHESSMAN RESERVOIR	6200	1/31	<u>7</u>	1.9	1.5	2.5
DALY CREEK	5780	1/28	<u>17</u>	3.4	9.4	-
MANY GLACIER	4960	2/01	<u>21</u>	<u>5.7</u>	-	-
MOOSE CREEK (ID)	6200	1/31	21	<u>4.2</u>	14.1	11.8
NEZ PERCE CREEK	6500	1/31	11	<u>1.5</u>	6.3	5.4
NORTH FORK ELK CREEK PILLOW	6250	1/31	SP	<u>4.1</u>	10.6	6.6
PICNIC GROUNDS	6200	2/01	8	<u>1.3</u>	3.6	3.0
PIKE CREEK PILLOW	5930	1/23	<u>SP</u>	8.0	-	-
PIPESTONE PASS	7200	1/31	<u>7</u>	<u>1.2</u>	6.4	3.8
SILVER RUN PILLOW	6630	1/28	<u>SP</u>	1.9	-	-
SKALKAHO SUMMIT PILLOW	7260	1/27	<u>SP</u>	6.1	-	-
TEN MILE MIDDLE	6800	1/29	<u>19</u>	3.7	11.3	8.2
WHITE ELEPHANT (ID)	7700	1/31	<u>24</u>	4.1	18.6	-
WOLVERINE (WY)	7650	<u>1/27</u>	19	4.0	14.7	-

### MARCH 1

BEAVER LAKE	5900	3/06	34	<u>9.5</u>	25.7	21.3
BLOODY DICK PILLOW	7600	2/24	<u>SP</u>	3.6	-	-
BOULDER MOUNTAIN PILLOW	7950	2/22	<u>SP</u>	6.7	-	-
COPPER MOUNTAIN	7700	3/02	22	<u>4.0</u>	12.9	10.0
FOOLHEN	8280	3/08	27	<u>6.4</u>	19.1	15.6
HAND CREEK PILLOW	5030	2/24	<u>SP</u>	5.1	-	-
KING CREEK SADDLE	4550	2/27	19	<u>4.9</u>	-	-
KING SPRINGS	4150	2/27	16	<u>4.0</u>	-	-
KINGS HILL	7500	2/28	35	<u>7.6</u>	-	-
MANY GLACIER	4960	<u>3/04</u>	26	<u>7.9</u>	-	-
NEZ PERCE CAMP	5580	<u>3/07</u>	23	<u>6.3</u>	15.6	13.0
NEZ PERCE CREEK	6500	3/02	17	<u>2.8</u>	8.4	6.3
PORCUPINE	6500	2/25	<u>SP</u>	6.5	-	-
TEN MILE MIDDLE	6800	2/24	19	<u>2.9</u>	13.3	10.4
UPPER HOLLAND LAKE	6200	3/06	<u>63</u>	<u>21.2</u>	33.8	33.7

Average based On 1958-72 period. A - Aerial observation; water content estimated.  
 SP - Snow Pillow observation; water content only.





# SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average

## CORRECTIONS TO PREVIOUSLY PUBLISHED 1977 DATA

### APRIL 1

COLE CREEK	7850	3/31	67	<u>13.4</u>	20.4	-
HEBGEN DAM	6550	3/30	28	<u>7.8</u>	16.8	11.6
HOODOO BASIN PILLOW	6000	<u>3/30</u>	SP	<u>21.7</u>	54.7	53.3
INTERGAARD	6450	4/03	26	<u>5.6</u>	13.2	9.2
LAKE CREEK	6100	3/31	17	<u>4.2</u>	10.6	7.5
LOLO PASS (ID)	5230	3/31	56	<u>15.4</u>	38.1	32.8
LOLO PASS PILLOW	5230	3/28	SP	<u>14.5</u>	31.4	-
LOOKOUT (ID)	5250	3/28	62	<u>18.6</u>	39.0	38.7
PETERSON MEADOWS	7200	3/31	32	<u>7.6</u>	16.2	10.1
PICKET PIN LOWER	6200	3/31	<u>2</u>	<u>.3</u>	4.3	-
TEN MILE LOWER	6600	3/30	32	<u>6.2</u>	9.8	7.8
TEN MILE UPPER	8000	3/30	47	<u>8.8</u>	16.3	15.0
TV MOUNTAIN	6800	4/05	41	<u>11.5</u>	23.0	20.3
WILLOW CREEK	6500	3/31	<u>43</u>	<u>9.7</u>	11.0	-
WRONG CREEK	5700	3/31	32	<u>7.1</u>	14.2	16.2

### MAY 1

EAST BOULDER S	9250	5/05	<u>51</u>	<u>20.5A</u>	42.5	-
KINGS HILL	7500	5/02	29	<u>12.2</u>	19.0	17.1
MARIAS PASS	5250	4/28	3	<u>.8</u>	14.8	19.3
PICKET PIN D	9450	5/05	<u>29</u>	<u>9.5A</u>	42.5	-
PLACER BASIN F	8800	5/05	<u>33</u>	<u>11.0A</u>	34.0	-
PTARMIGAN #8	5800	4/28	41	<u>16.2</u>	43.7	42.0
STEMPLE PASS	6600	5/02	5	<u>1.4</u>	15.0	11.9
STORM LAKE	7780	<u>4/27</u>	<u>15</u>	<u>5.1</u>	22.7	17.4
TEN MILE UPPER	8000	4/30	10	<u>3.2</u>	22.6	17.1
WEST YELLOWSTONE	6700	4/27	<u>0</u>	<u>.0</u>	15.2	7.2
WHITE MILL PILLOW	8700	5/03	SP	<u>11.0</u>	34.7	-

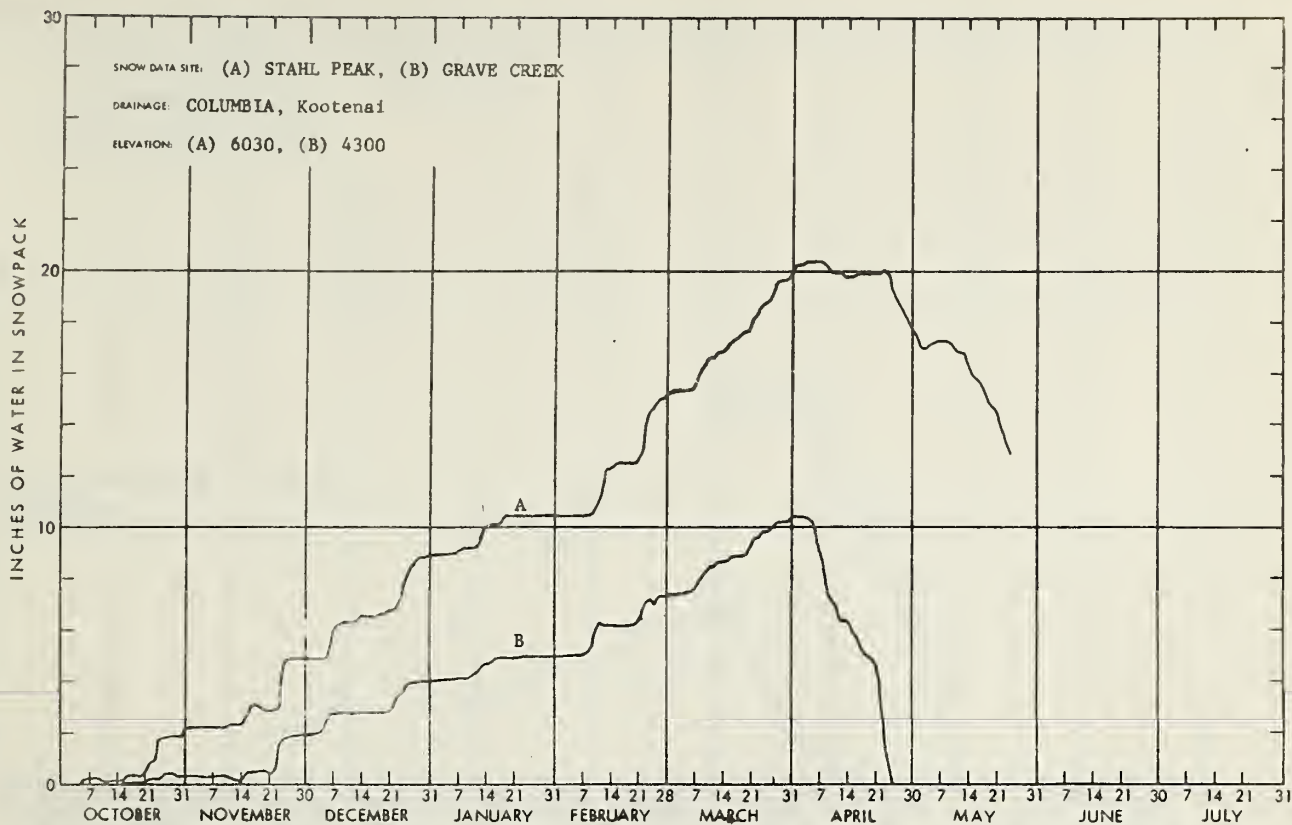
### MAY 15

BANFIELD MOUNTAIN PILLOW	5600	<u>5/15</u>	SP	.0	10.5	13.8
DEVILS SLIDE	8100	<u>5/15</u>	EST	15.7	30.8	28.0
GARVER CREEK PILLOW	4250	<u>5/15</u>	SP	.0	.0	-
POORMAN CREEK PILLOW	5100	<u>5/15</u>	SP	.5	24.5	23.4
SADDLE MOUNTAIN PILLOW	7940	<u>5/13</u>	SP	<u>.8</u>	33.0	28.6

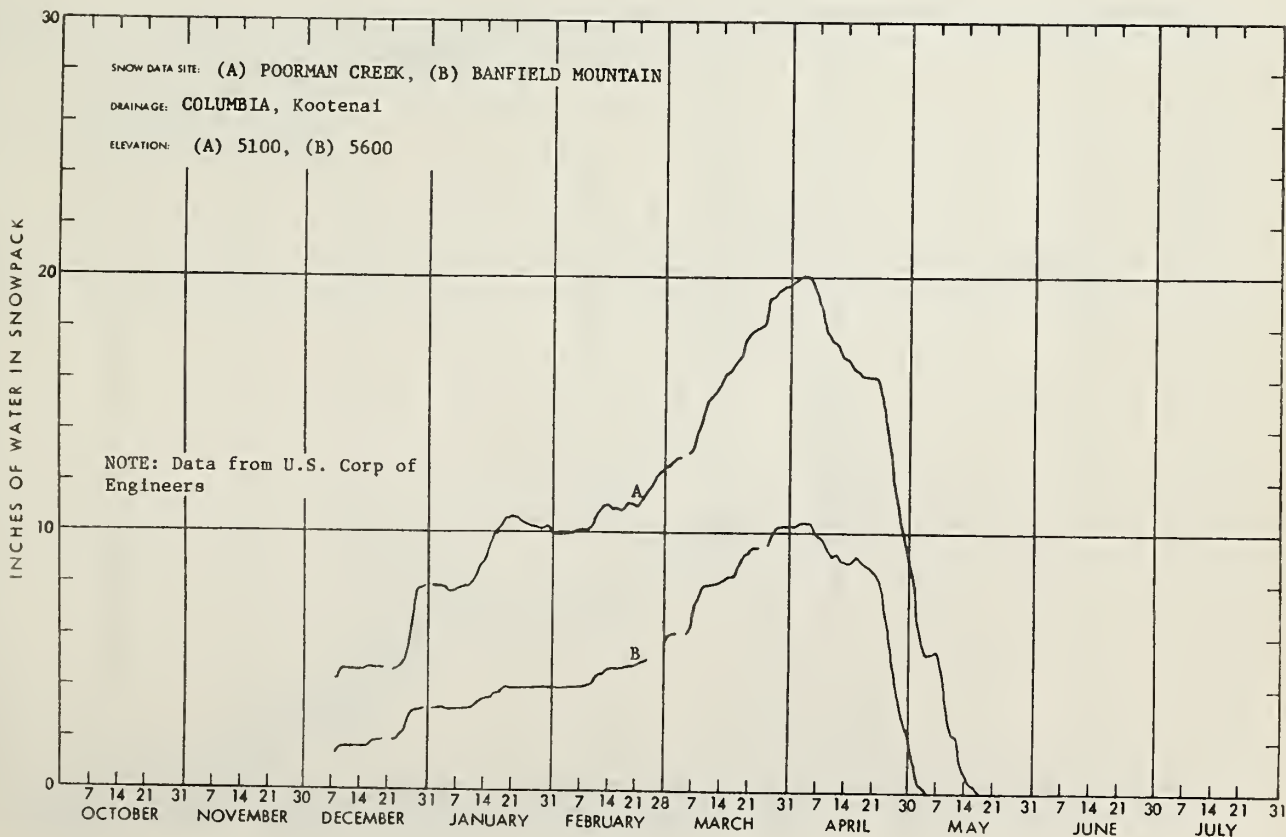
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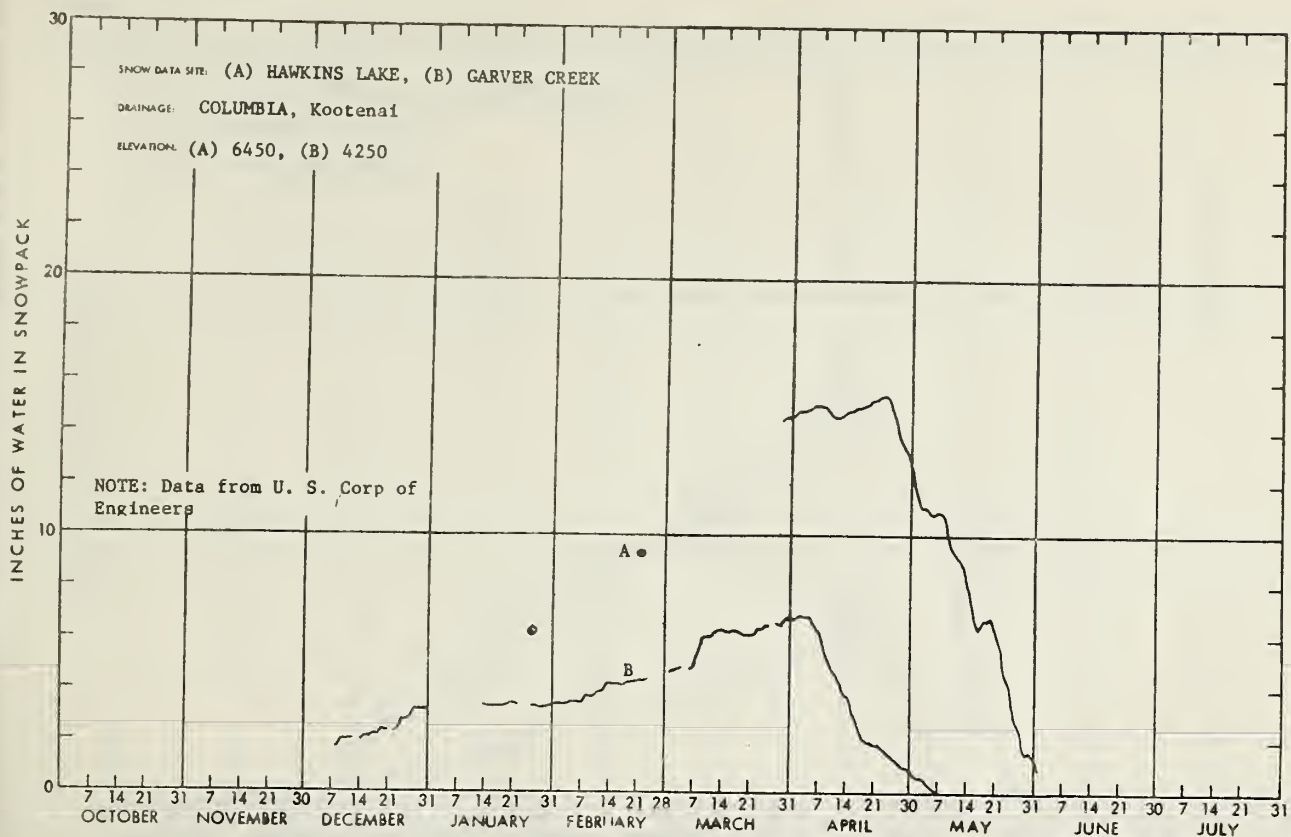




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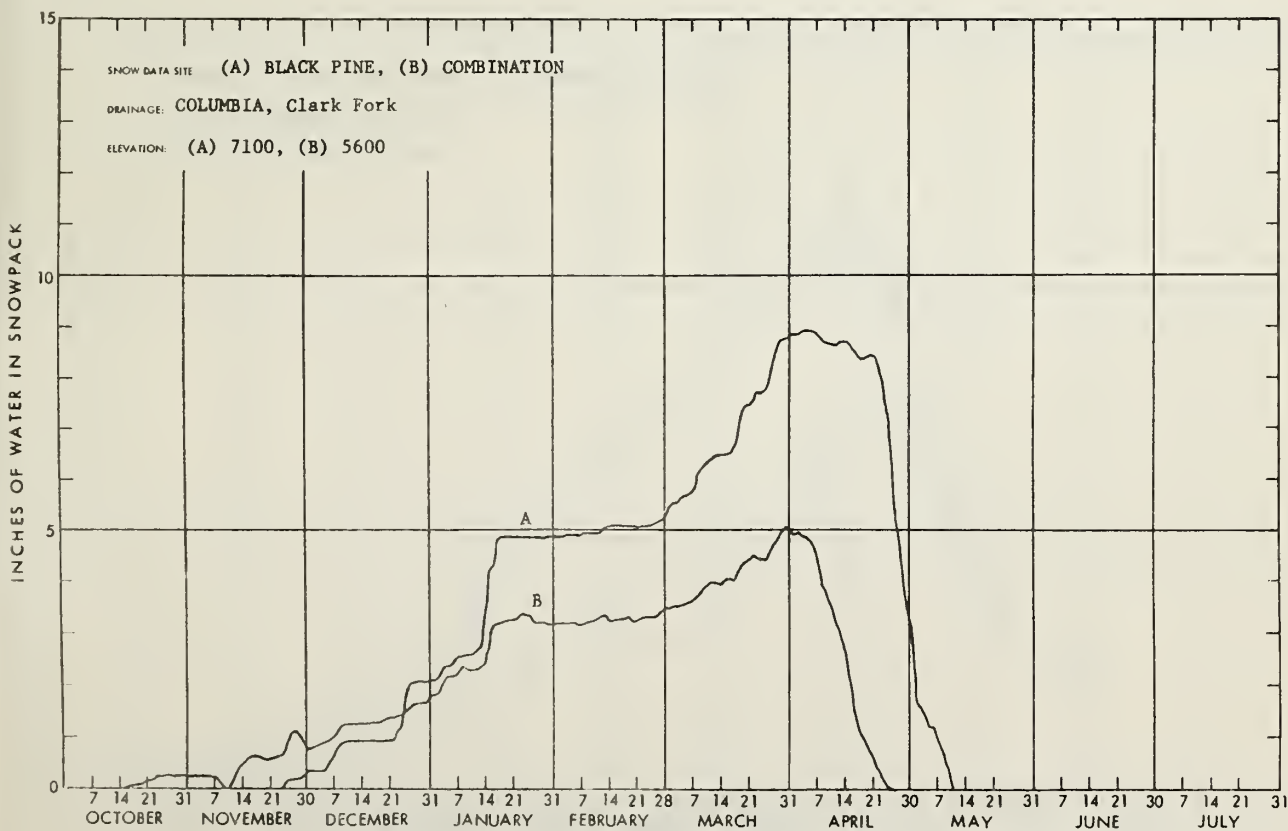






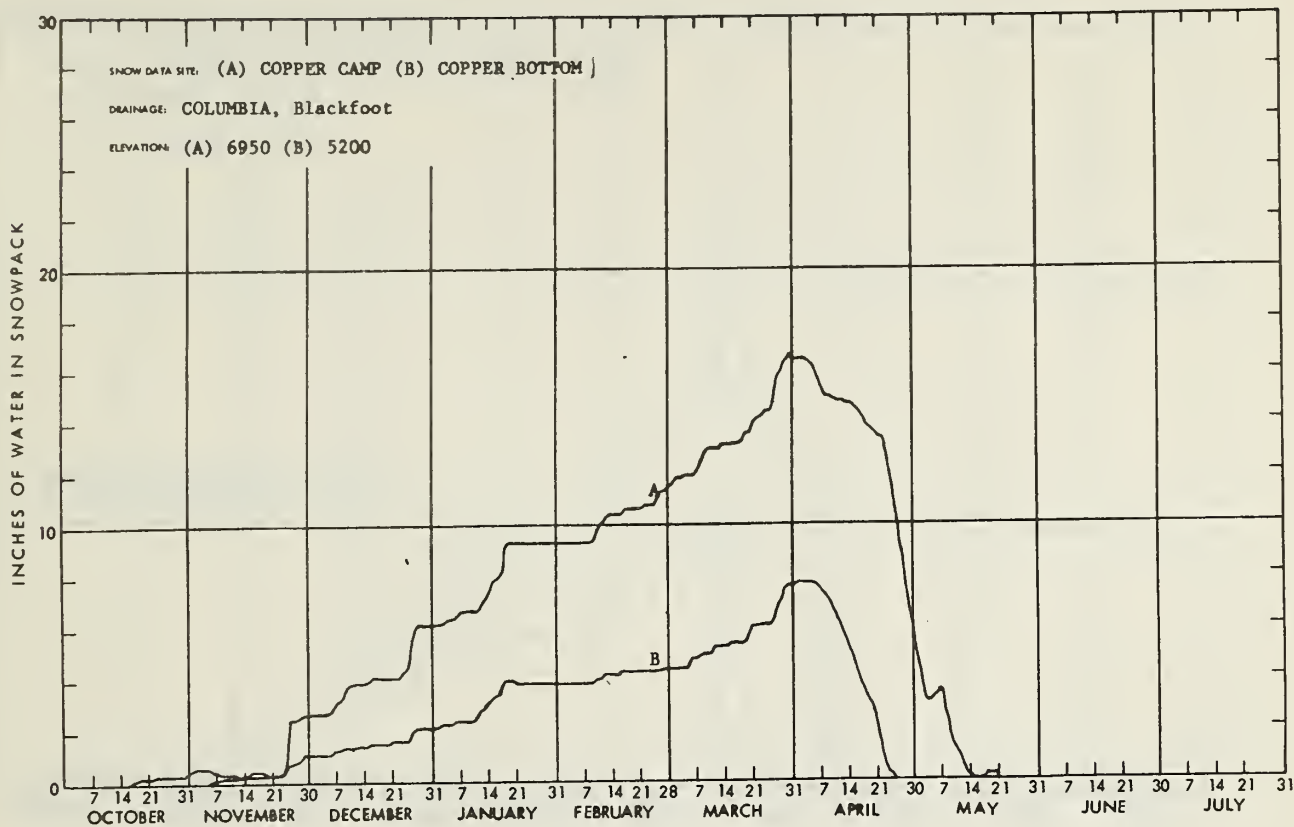
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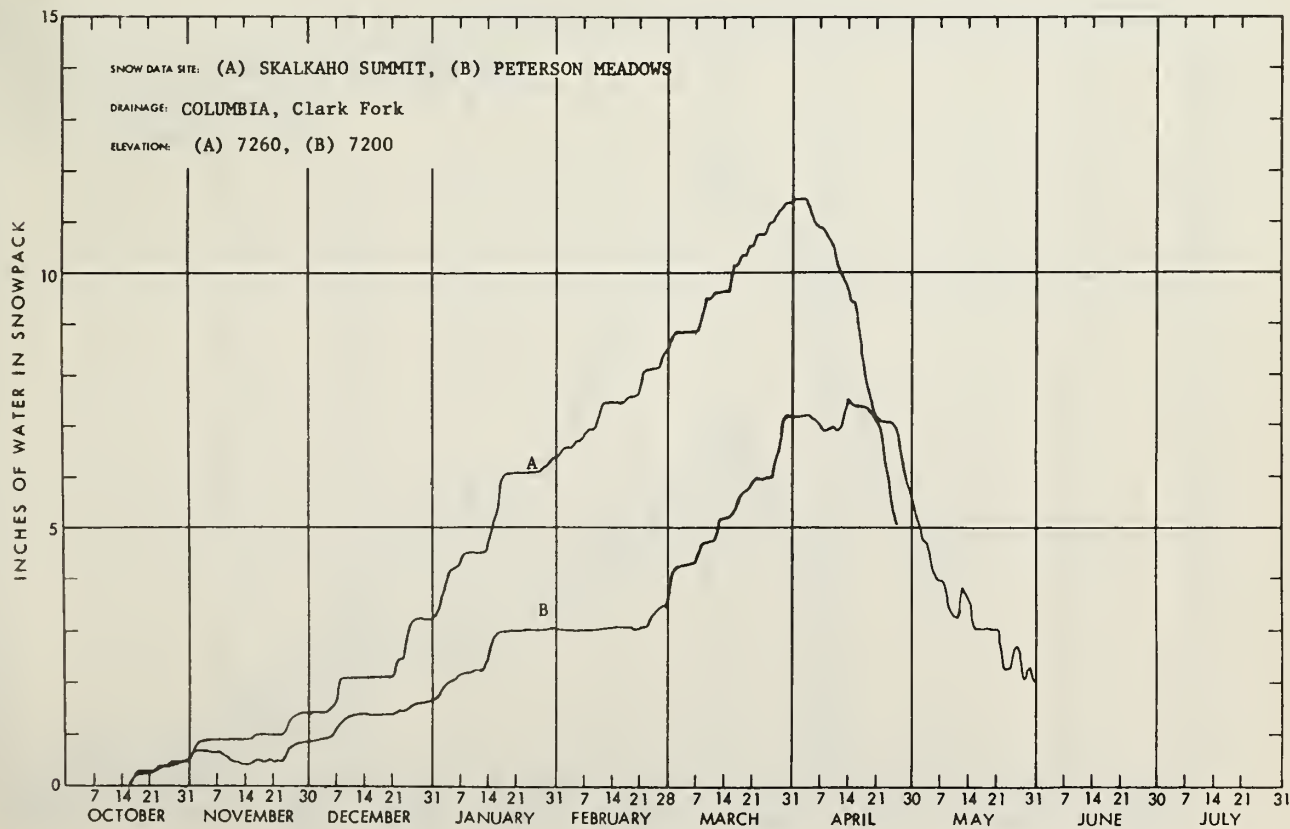




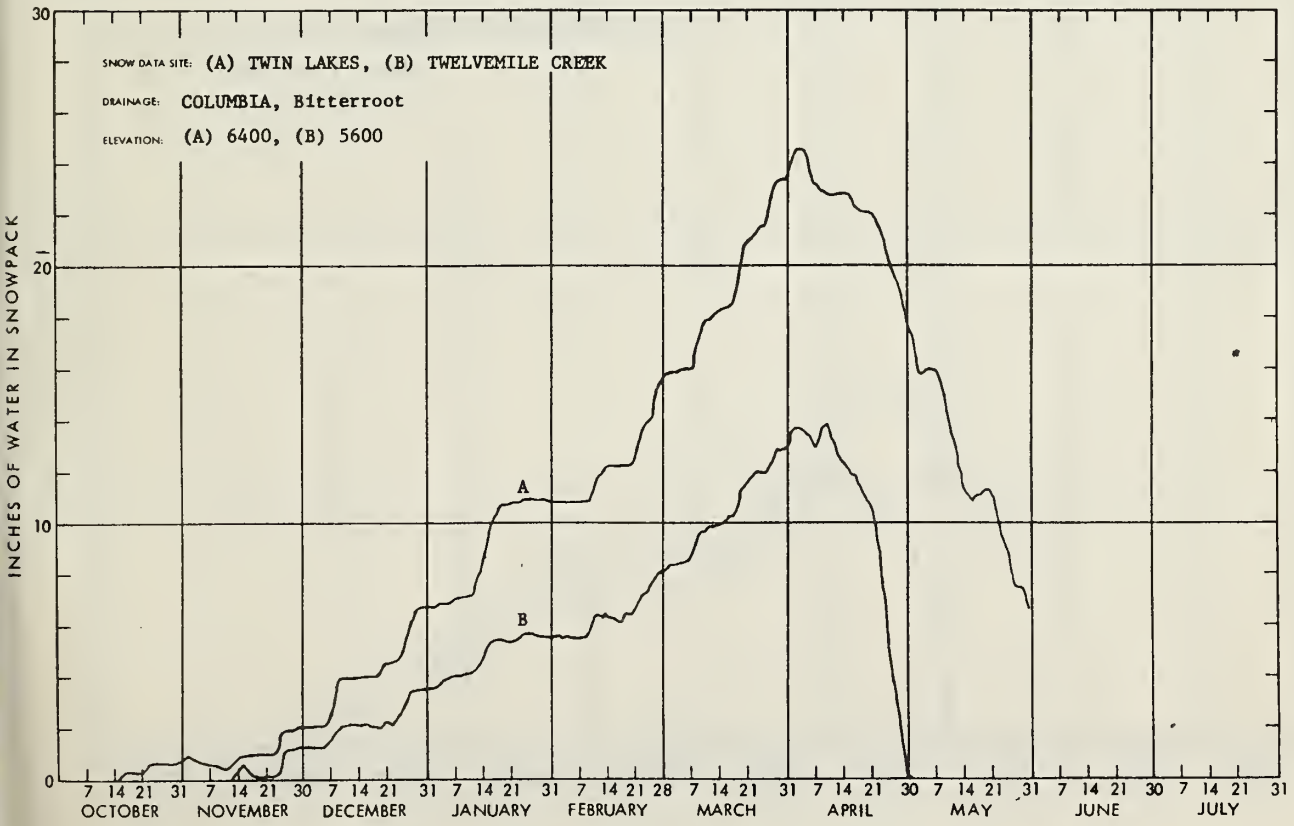
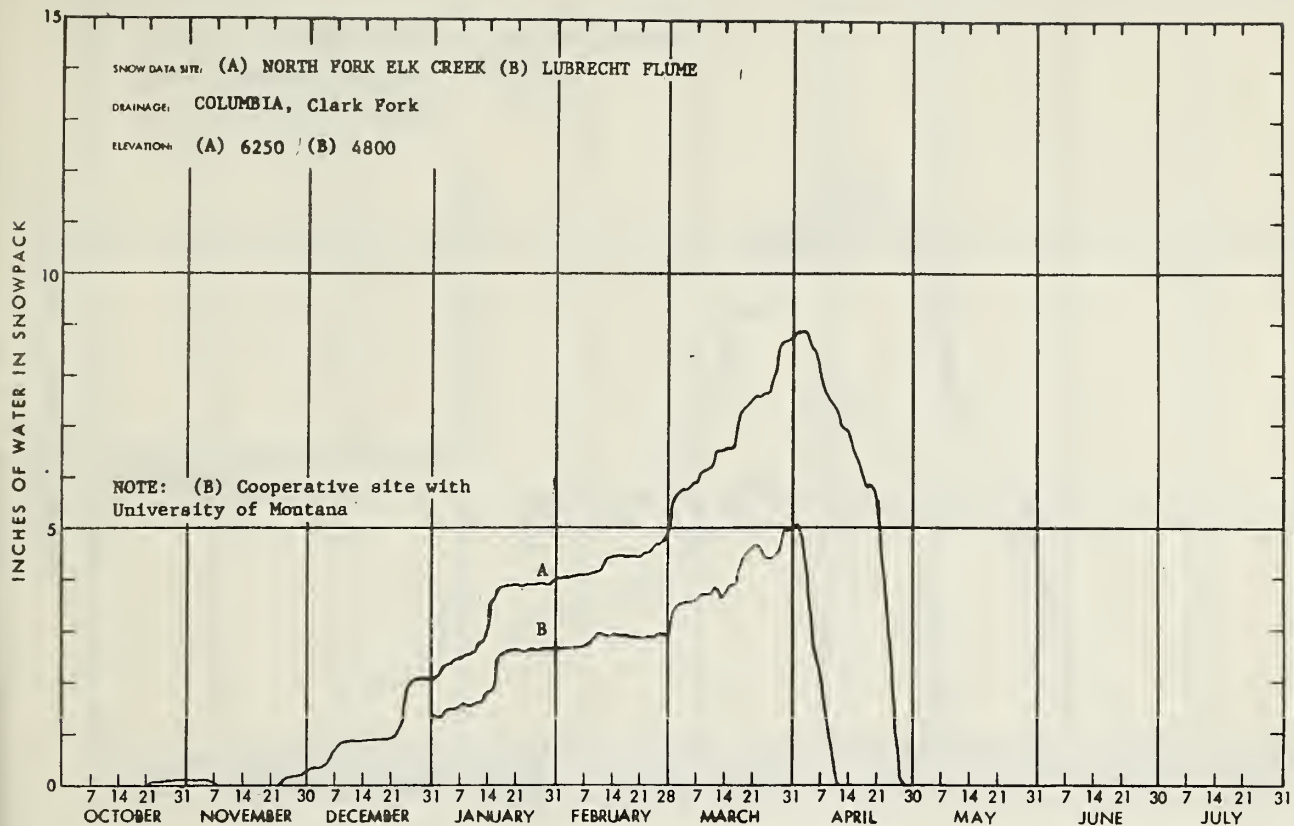




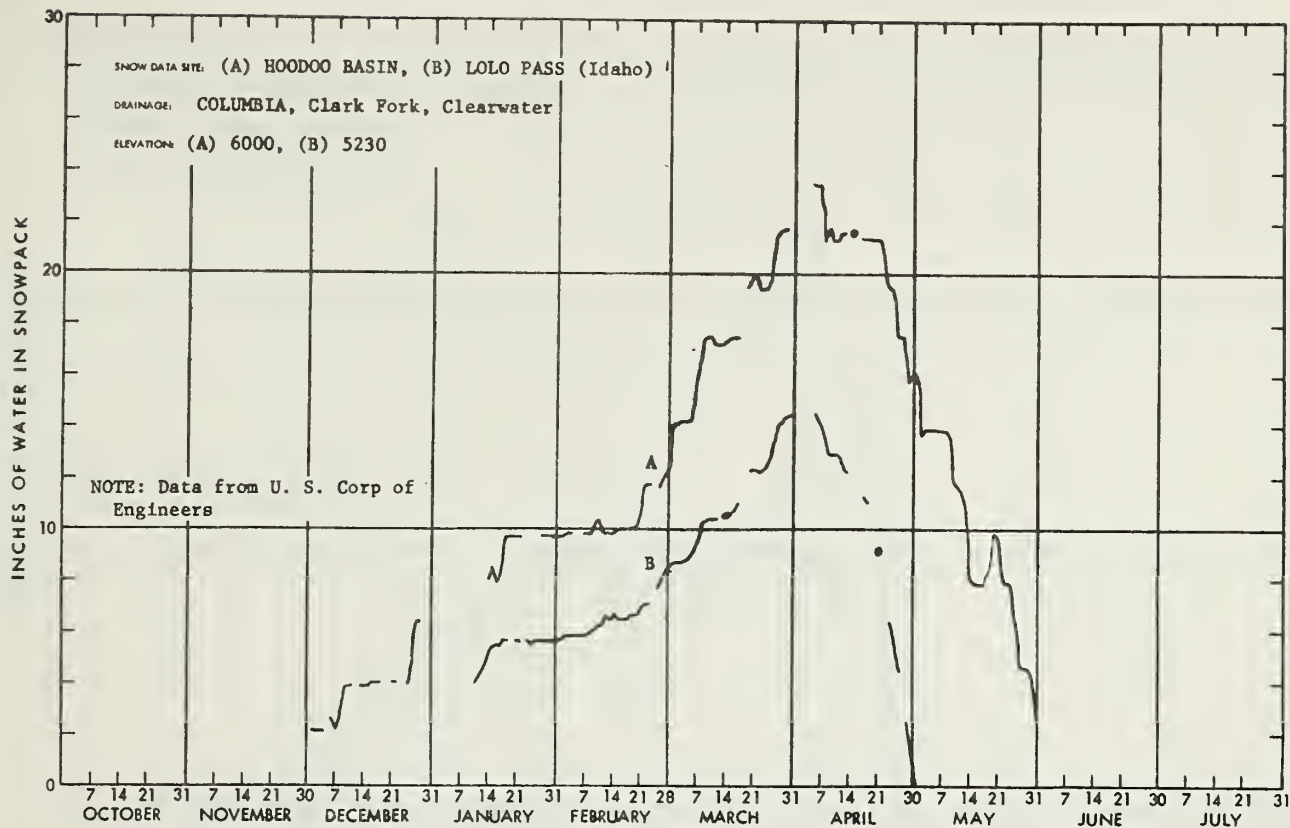
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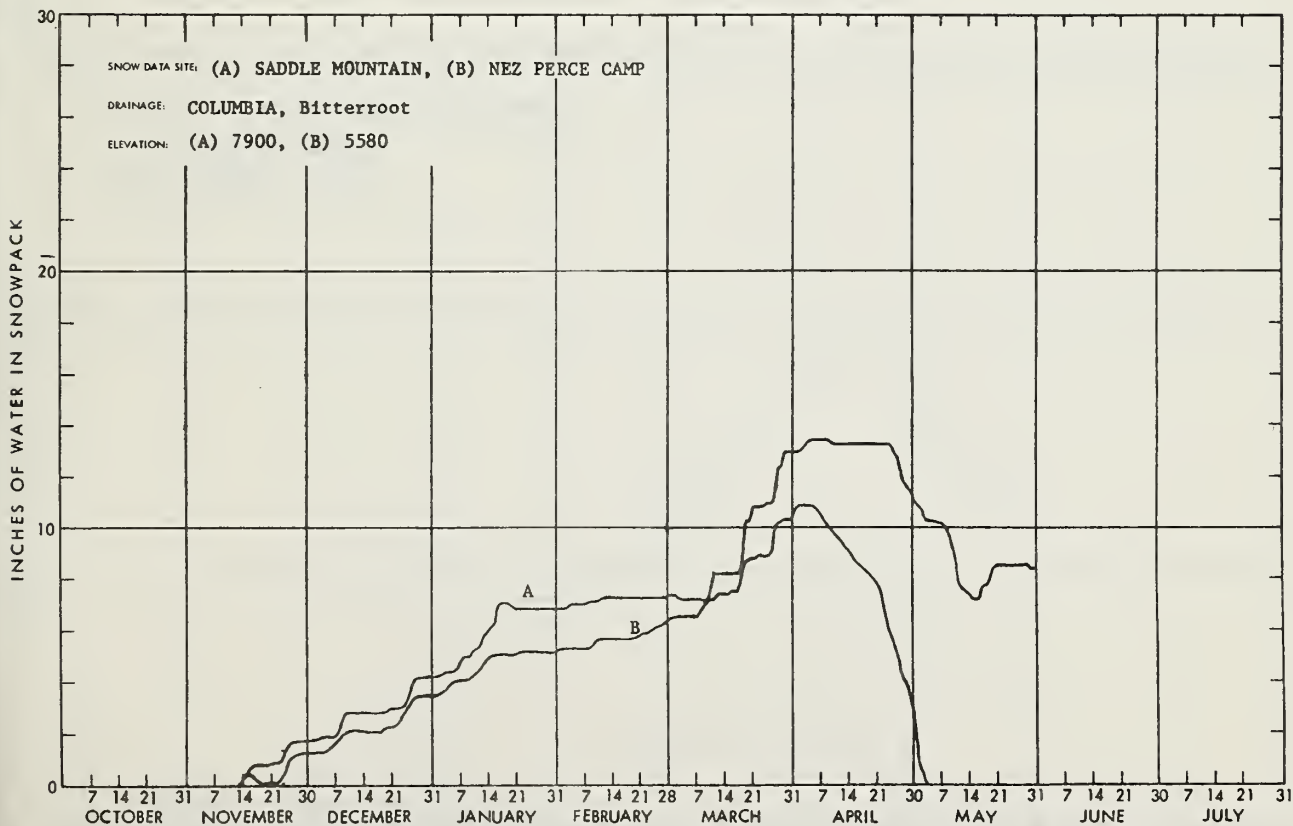




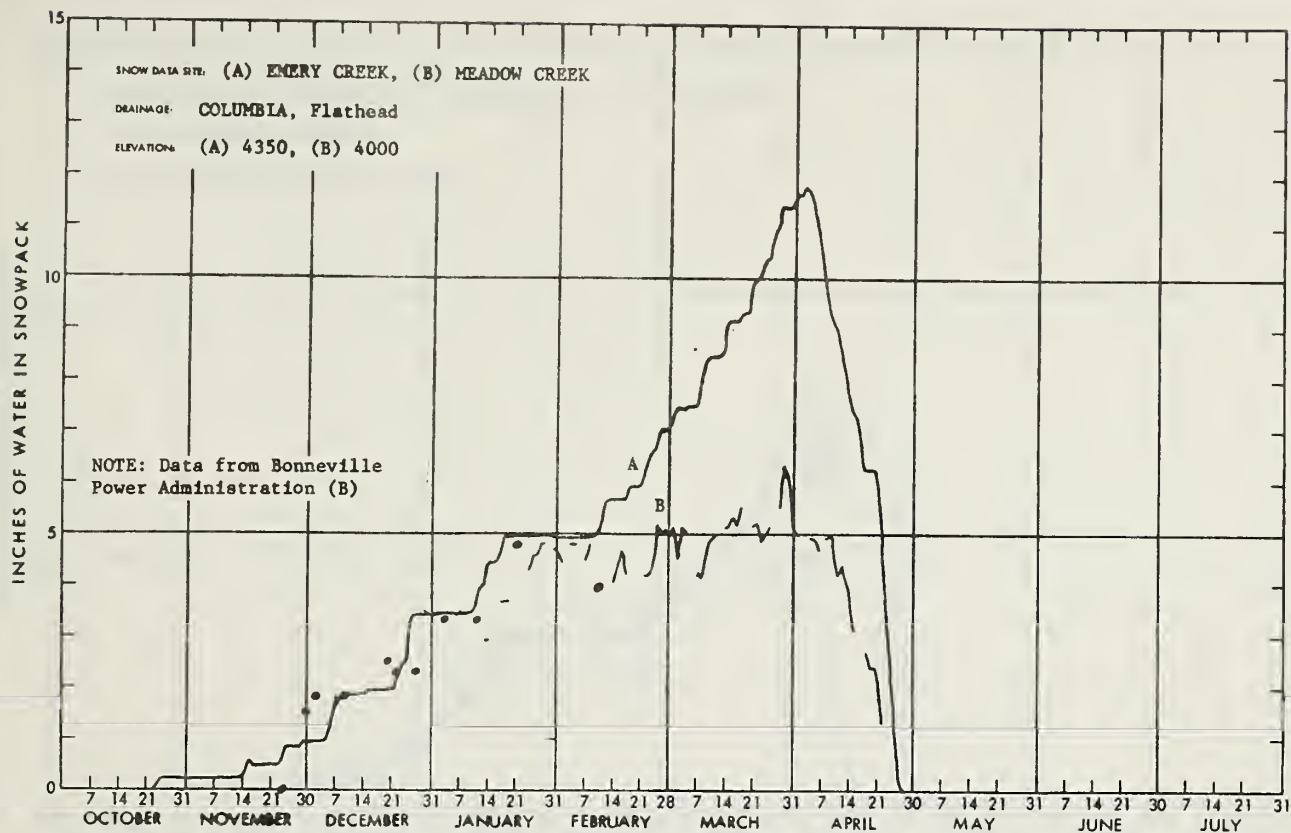


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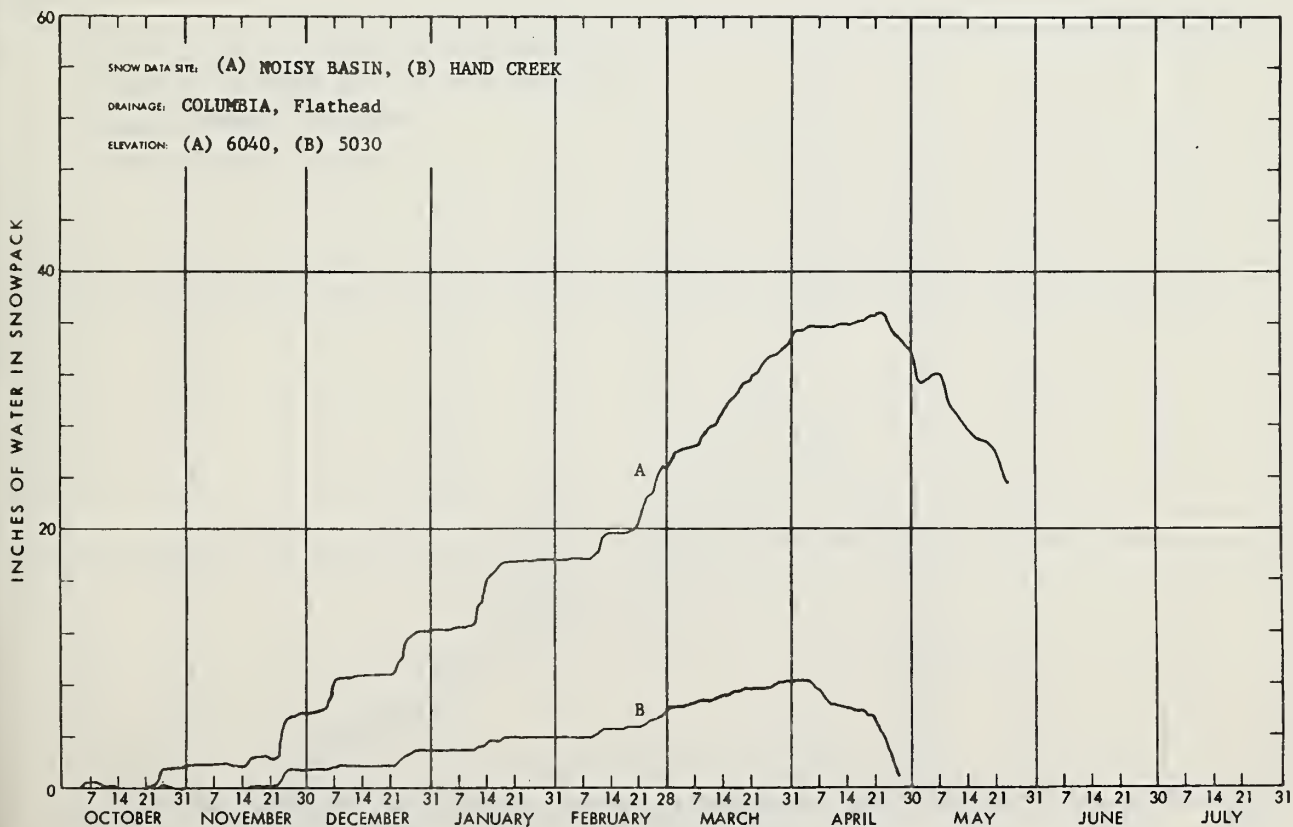






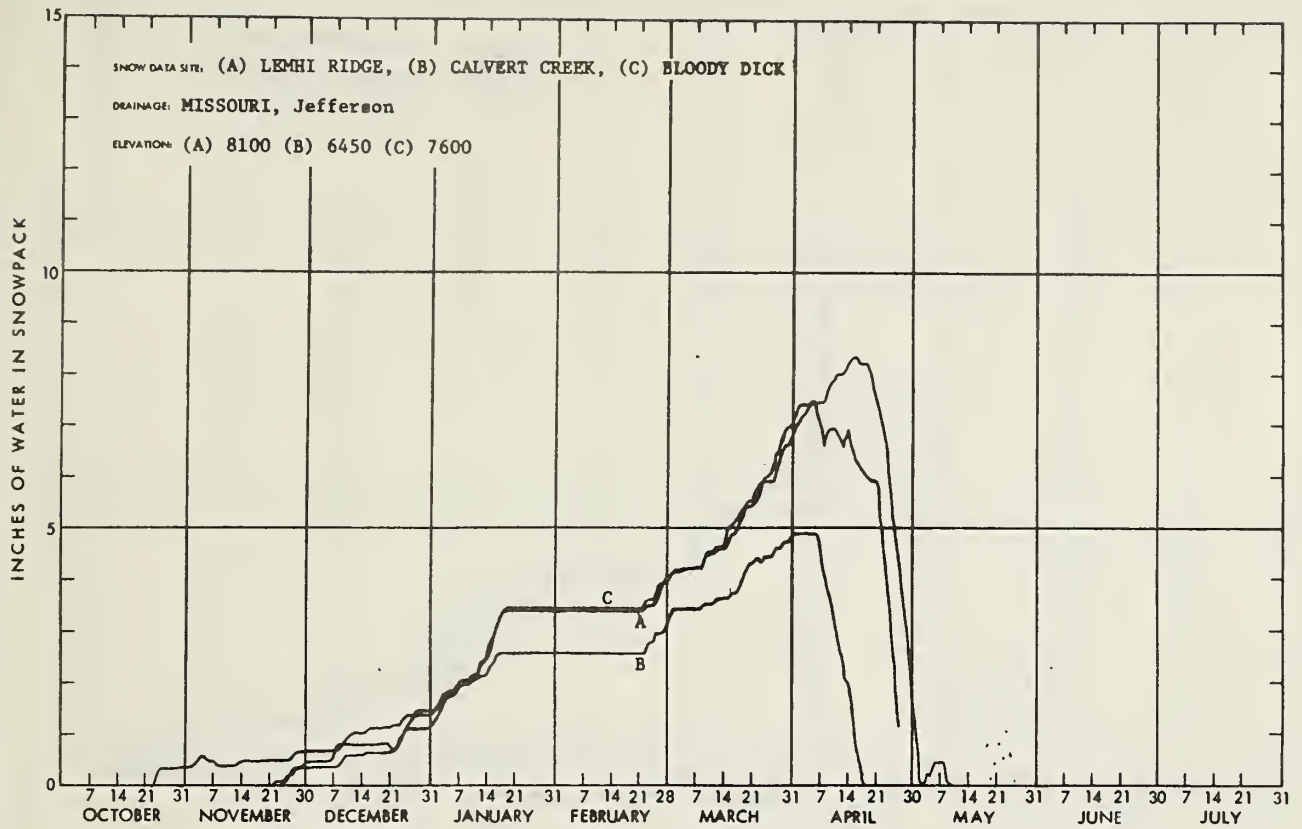
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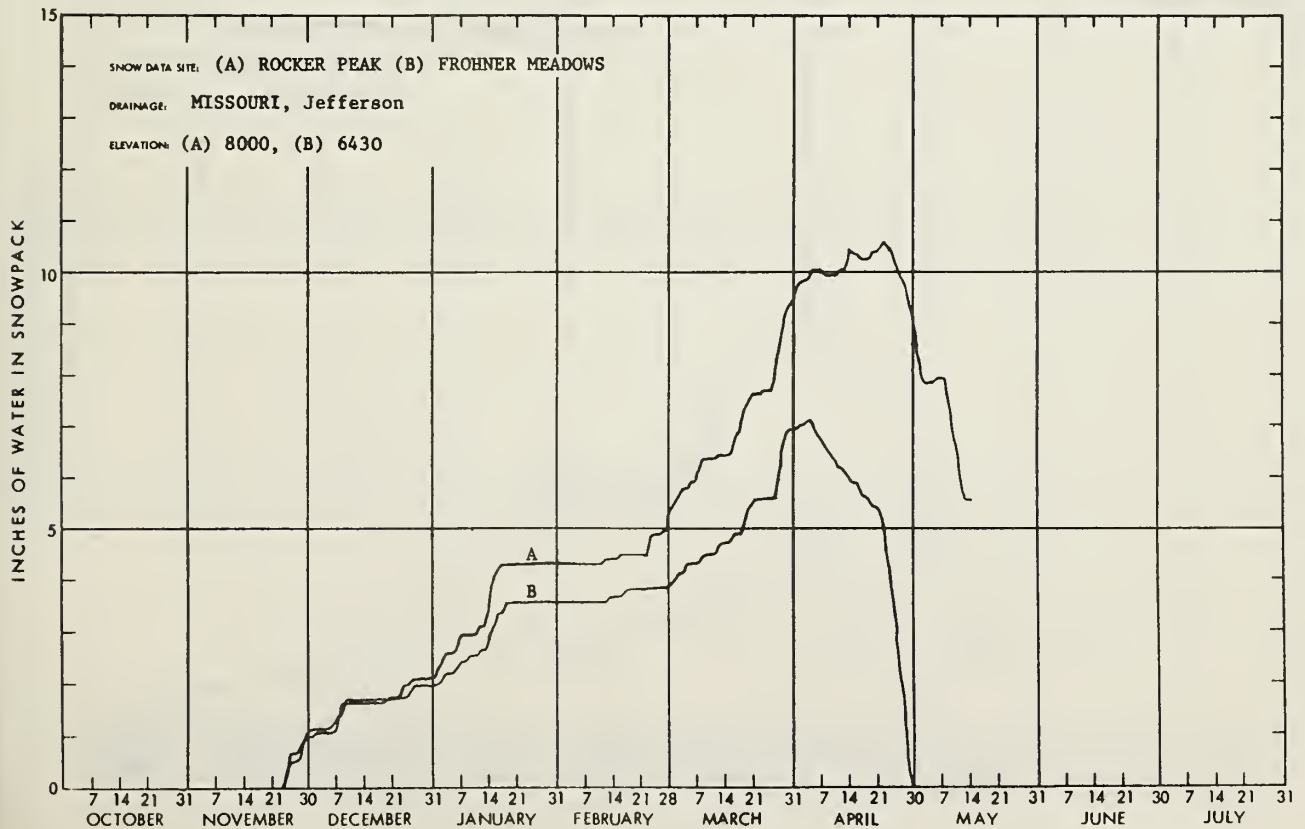




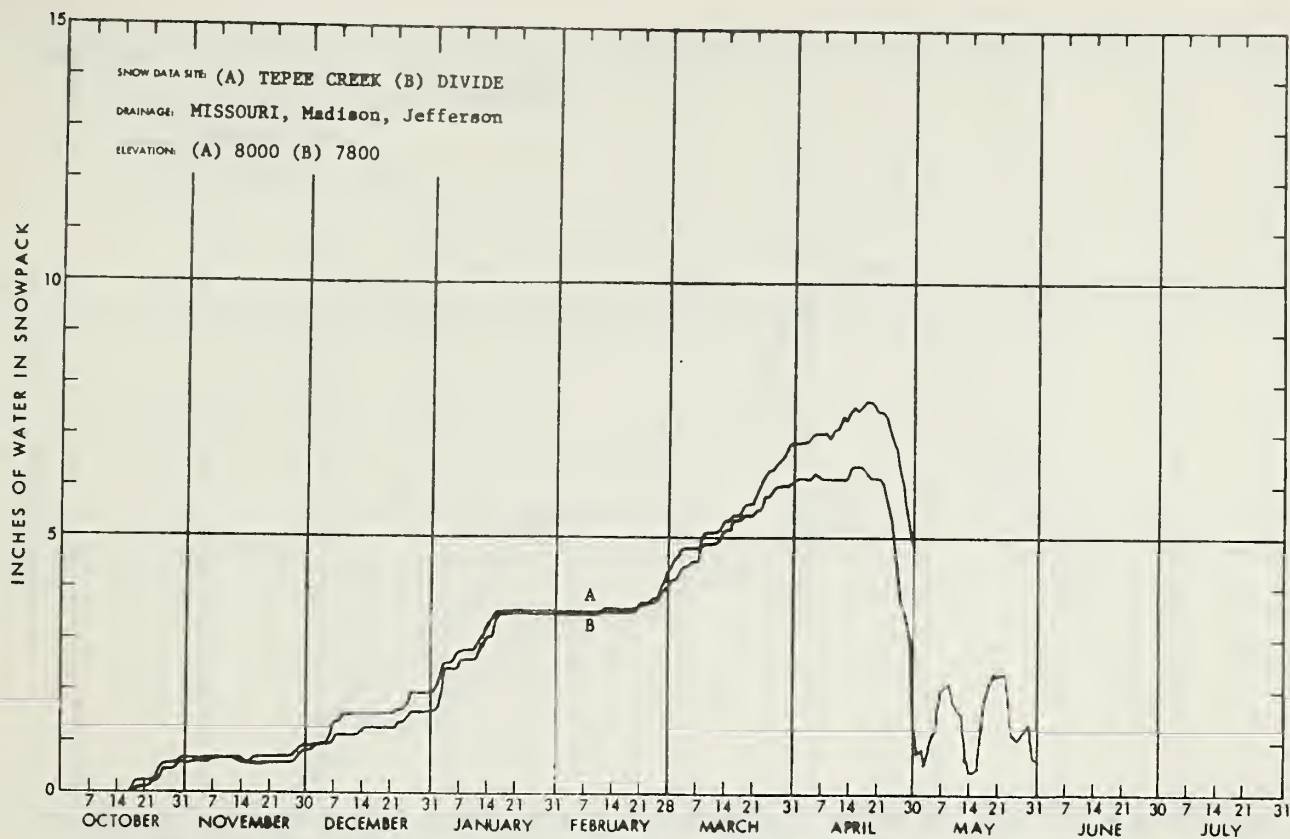




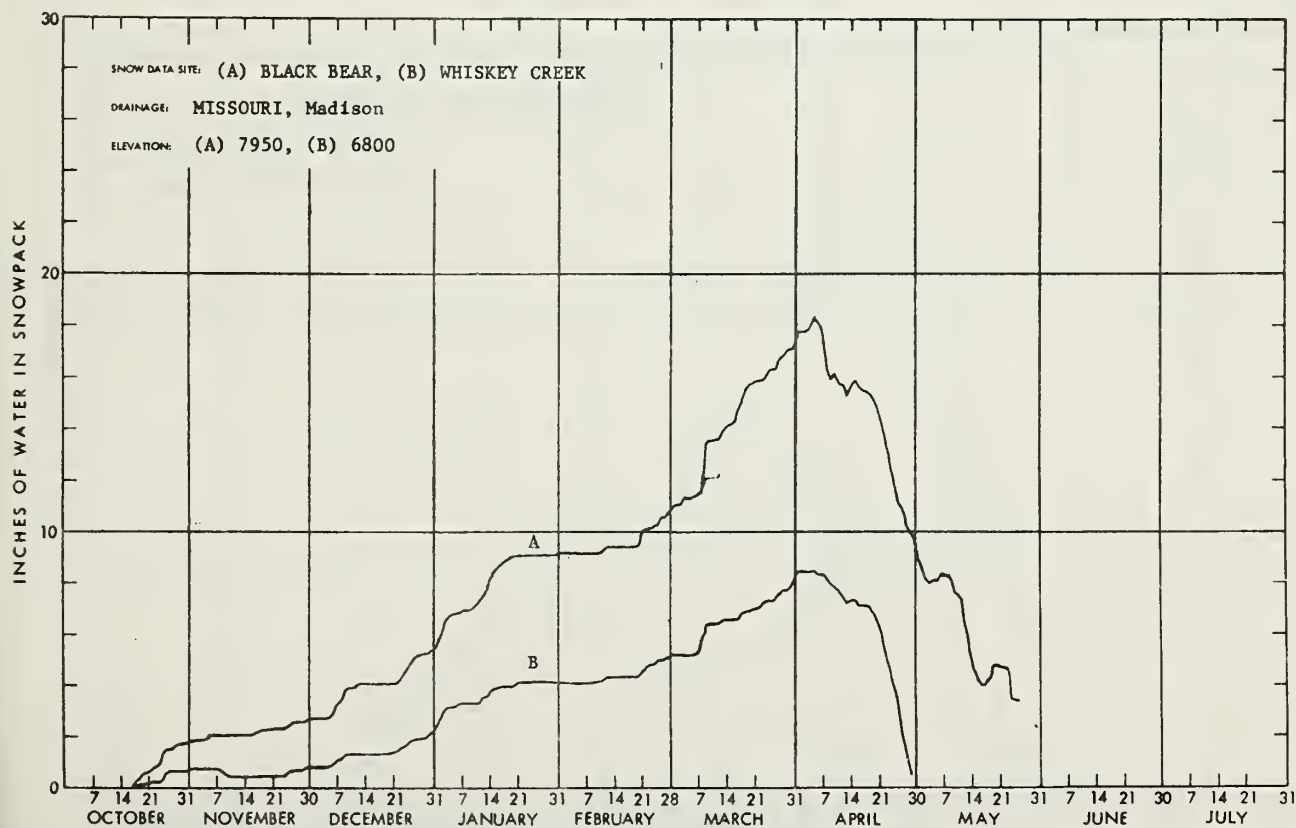
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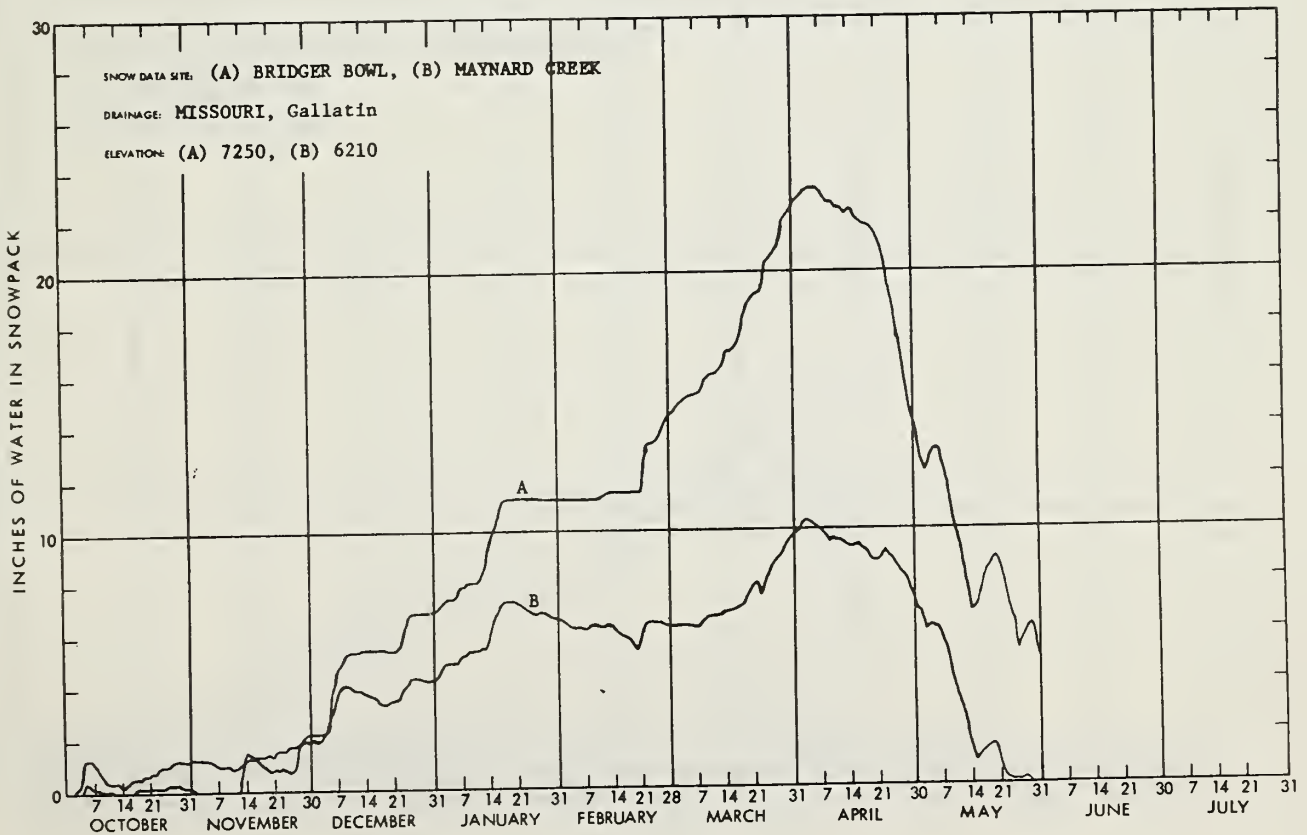
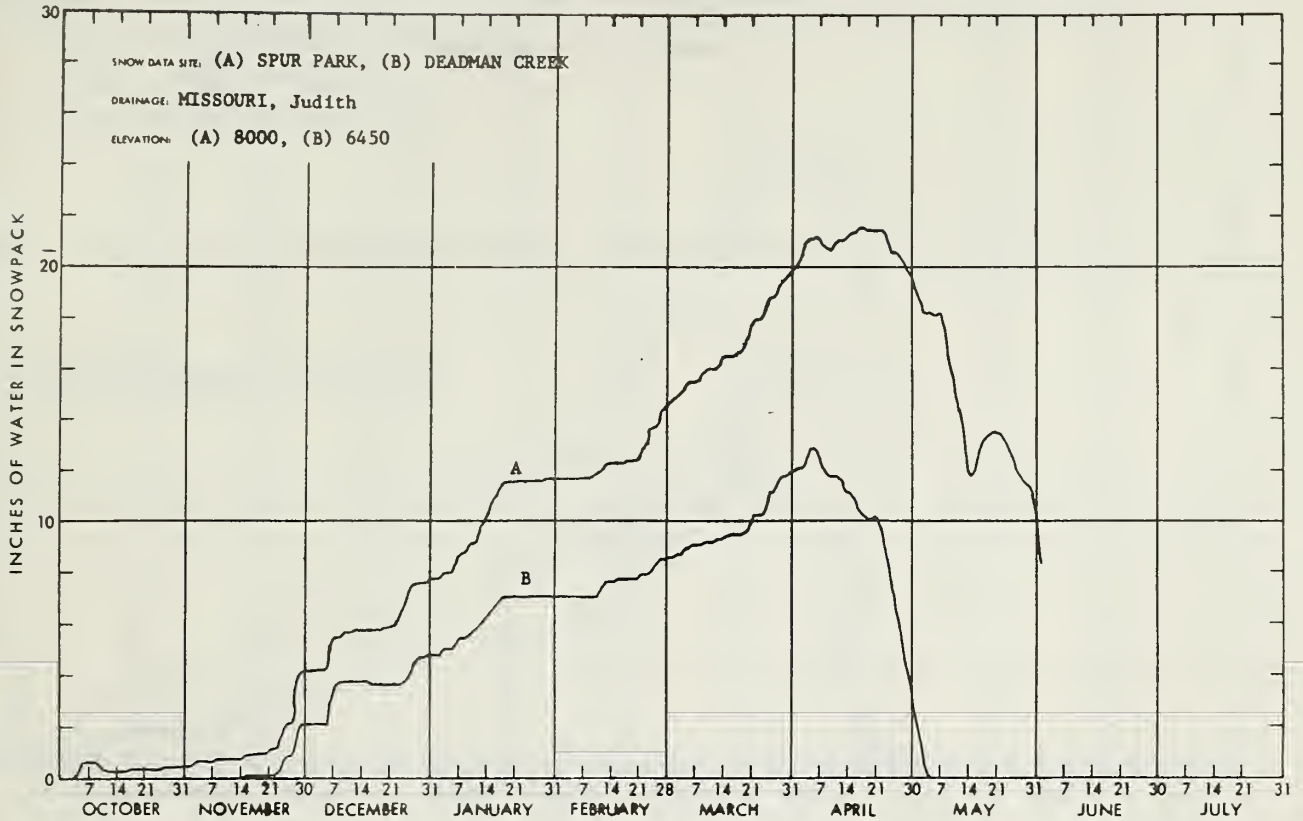




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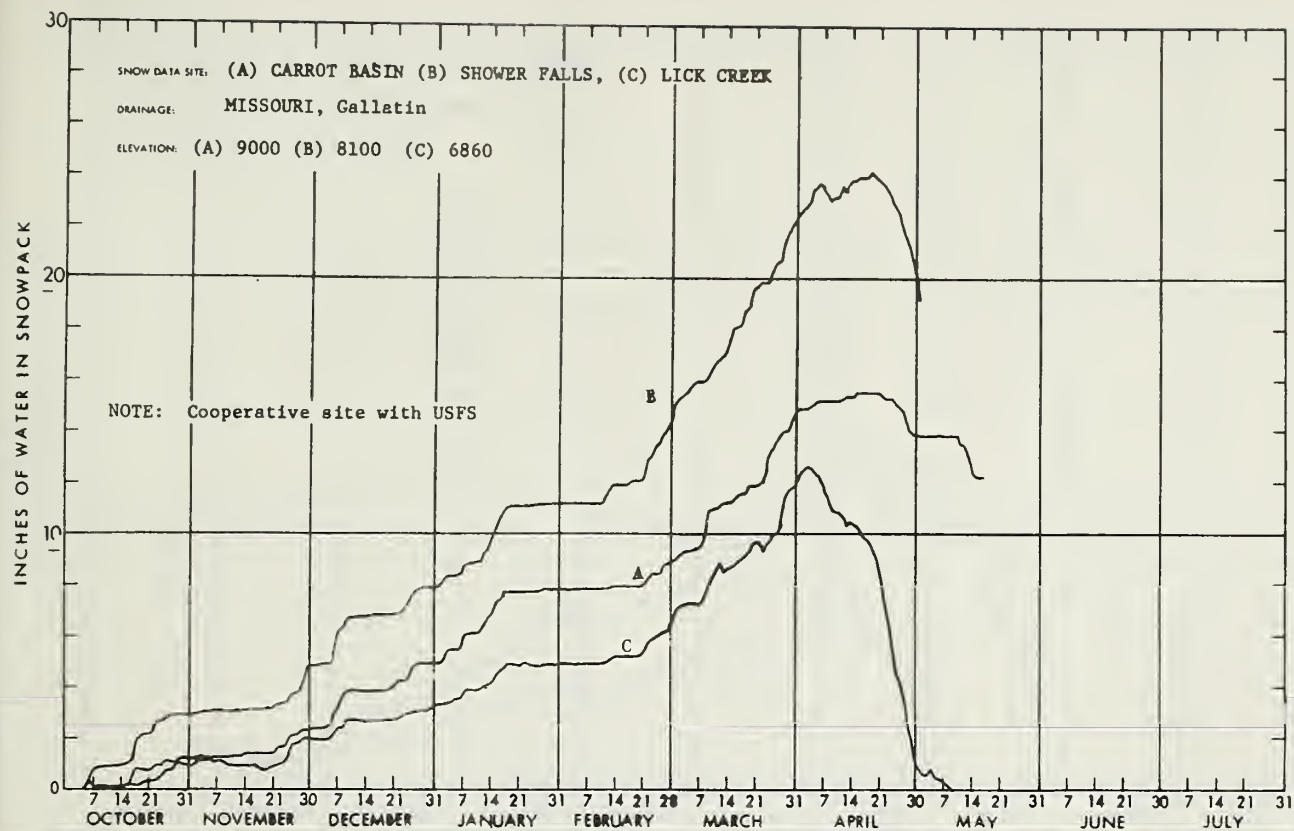




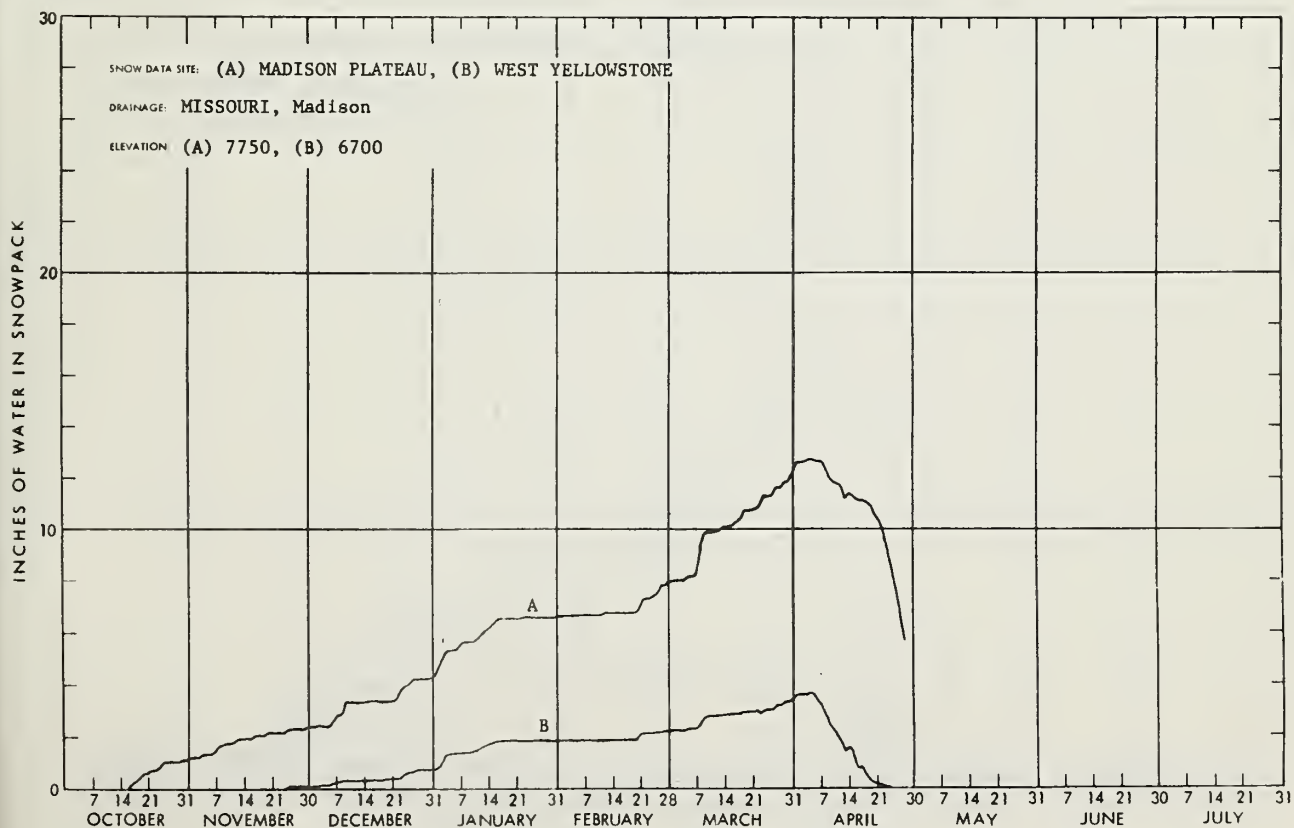




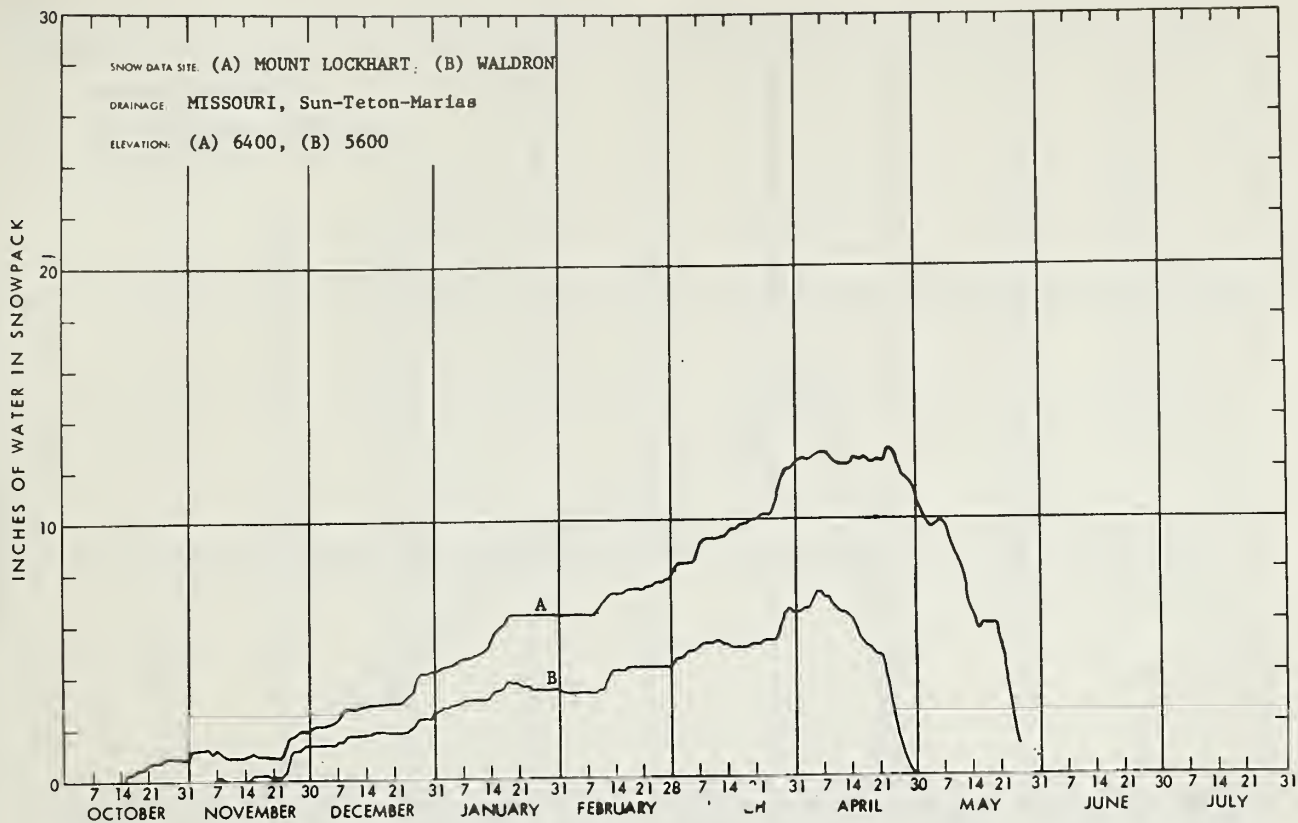




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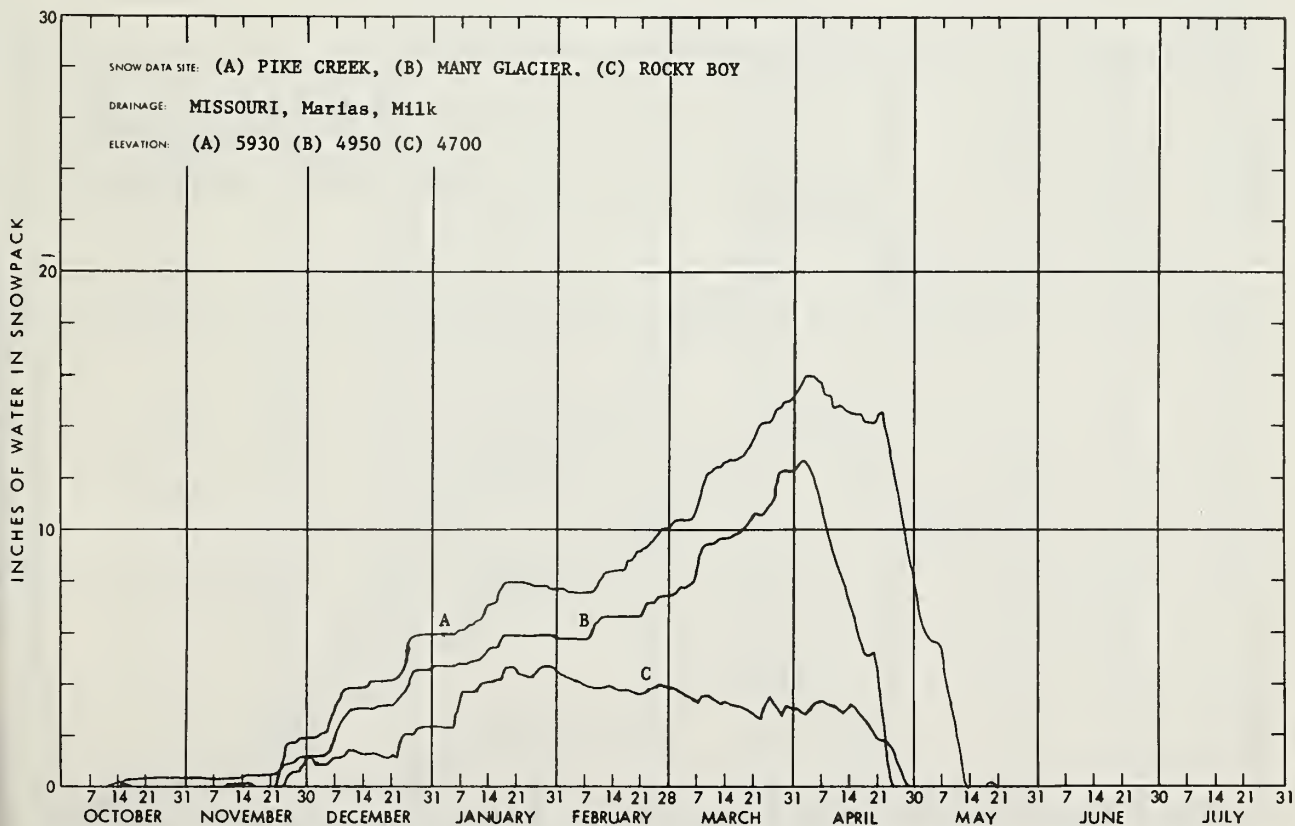




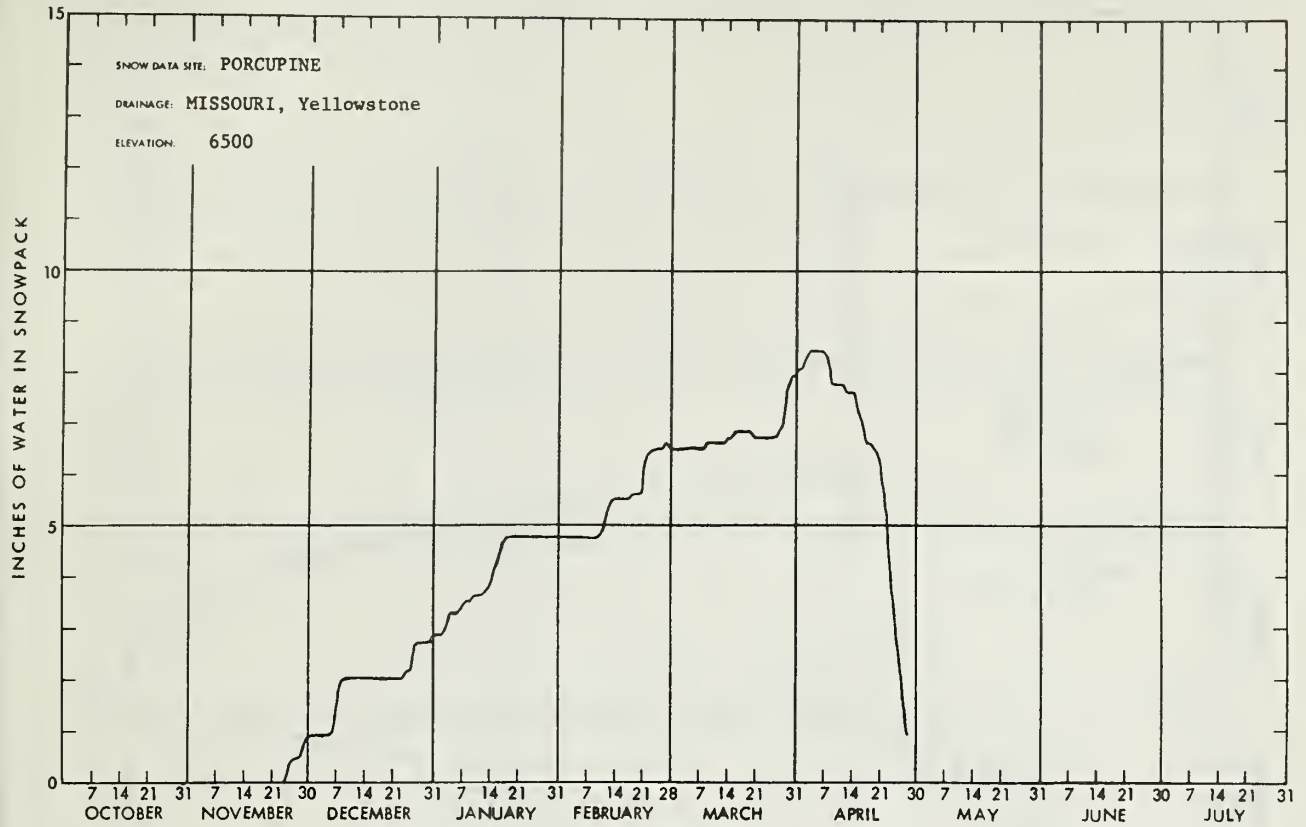


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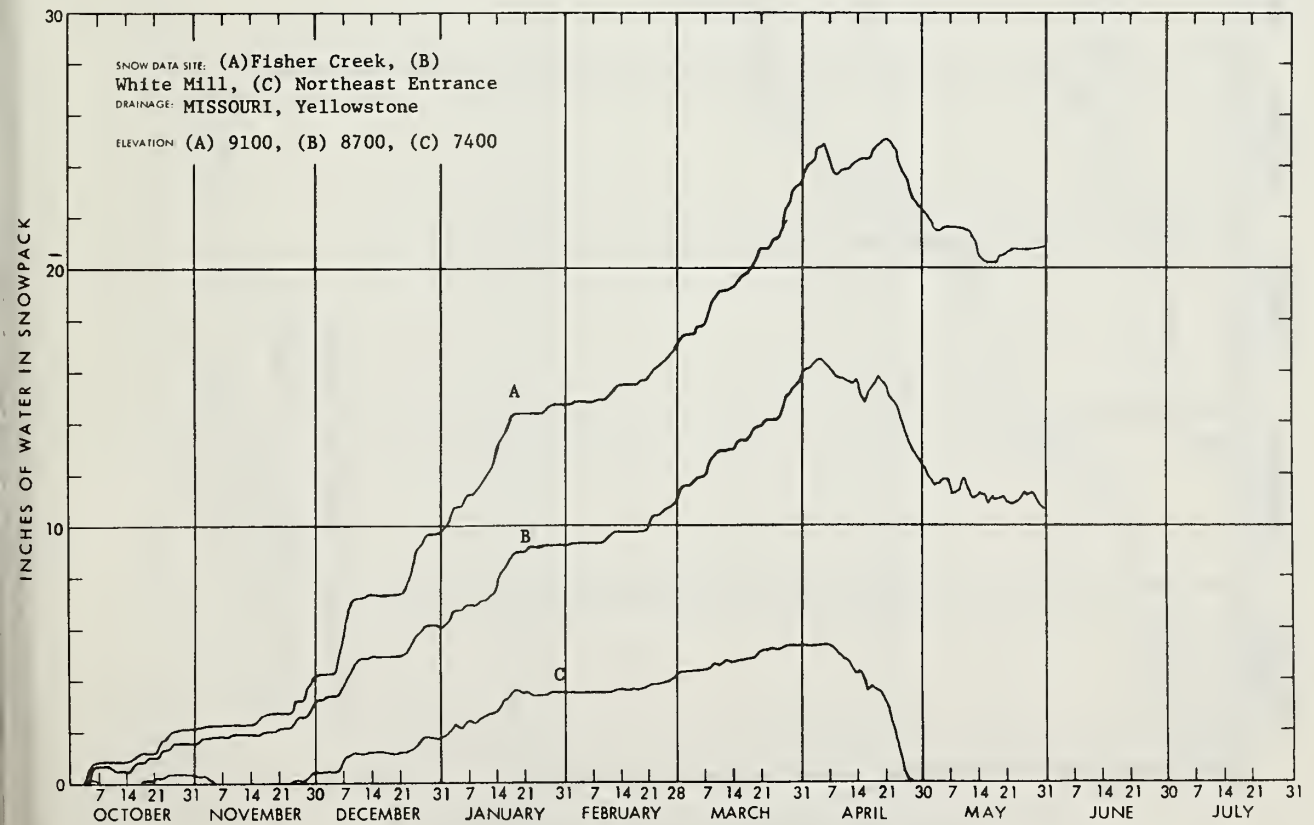
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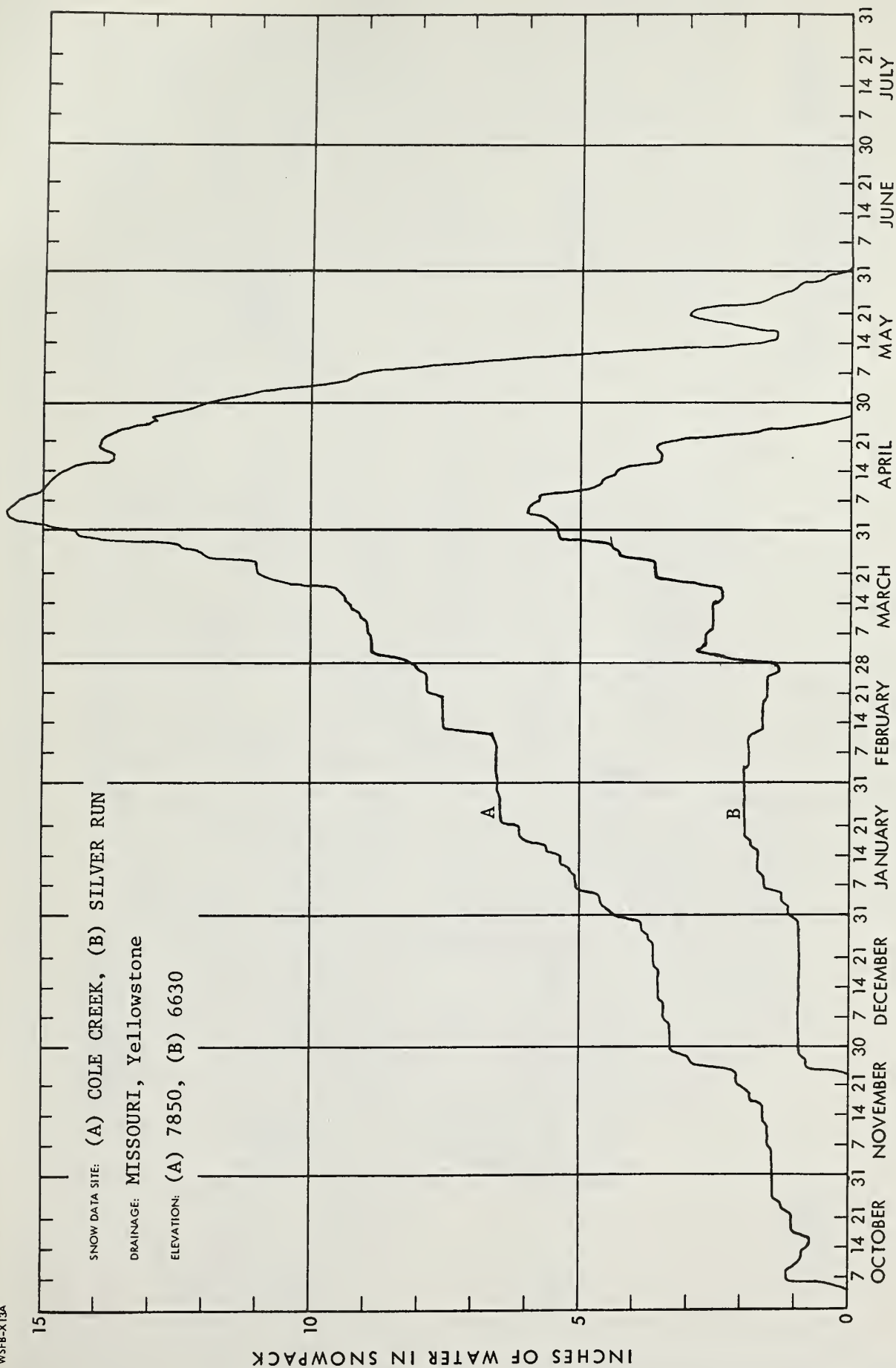




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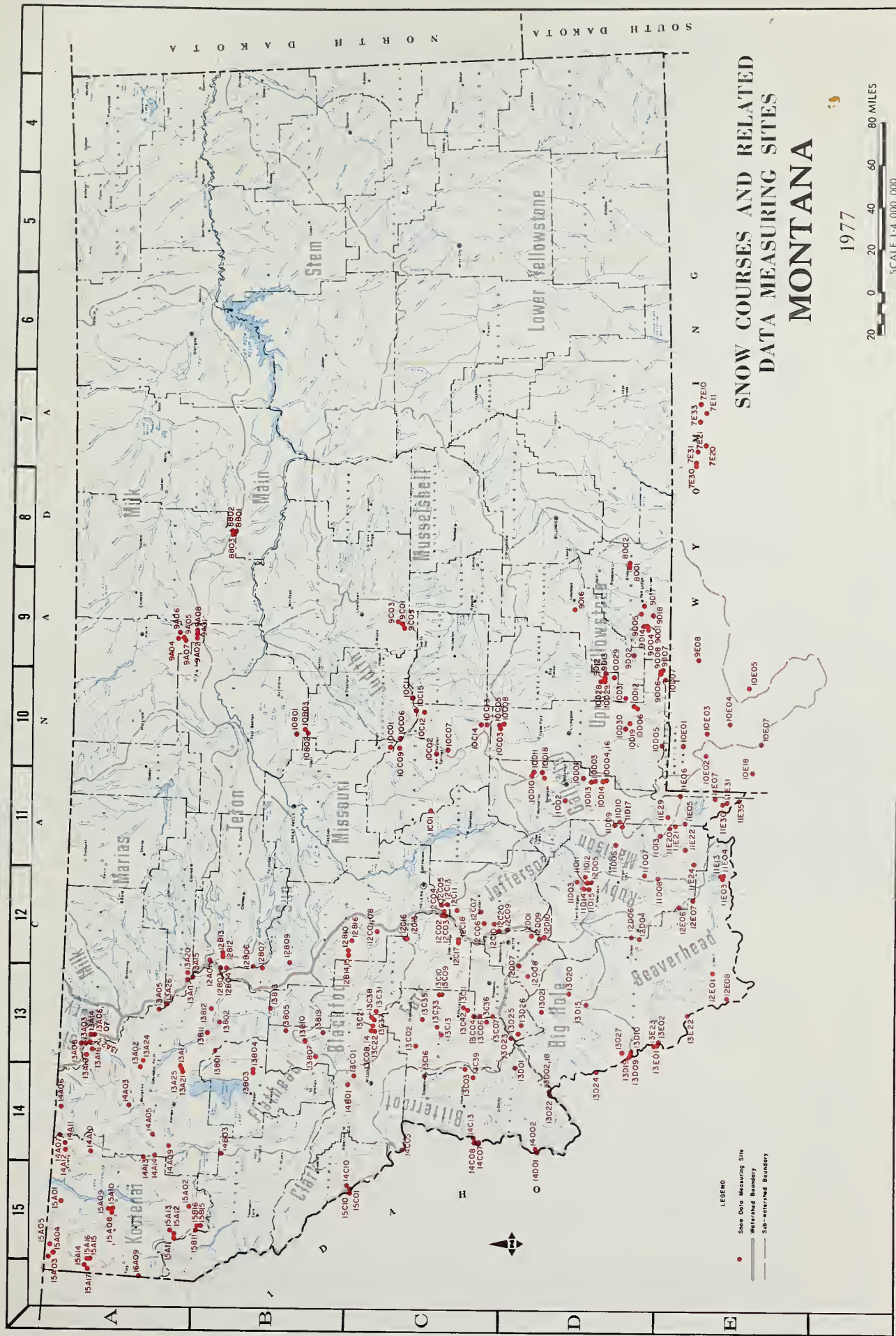
















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